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TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1929

No. 440

THE OHIO OIL COMPANY, APPELLANT,

vs.

E. A. CONWAY, SUPERVISOR OF PUBLIC ACCOUNTS OF THE STATE OF LOUISIANA

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE EASTERN DISTRICT OF LOUISIANA

FILED OCTOBER 14, 1929

(34,571)

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INDEX

	Original	Print
Record from the district court of the United States, Eastern Louisiana	1	1
Caption.....(omitted in printing)..	1	
Bill of complaint	2	1
Order to show cause	12	11
Answer	13	12
Motion for order substituting party defendant	19	17
Order substituting party defendant	21	19
Bond on injunction.....(omitted in printing)..	22	
Decree granting interlocutory injunction	24	20
Marshal's return on decree	25	20
Orders continuing cause	26	21
Argument and submission.....(omitted in printing)..	30	
Plaintiff's Exhibit "A-1"—Statement of severance tax paid by the Ohio Oil Co. under the present law and also amount would have paid under the new law....	31	22
Plaintiff's Exhibit "A-2"—Statement prepared by Mr. Burdick showing production of plaintiff company and statement of severance tax paid from August 1, 1928,		

JUDD & DETWEILER (INC.), PRINTERS, WASHINGTON, D. C., NOVEMBER 13, 1929

	Original	Print
to March 1, 1929, under present law, also amount would have paid under old law	42	30
Plaintiff's Exhibit "B-1"—Pages 128 and 130 from The Oil Weekly of May 25, 1928, showing crude oil price quotations	53	39
Plaintiff's Exhibit "C"—Statement showing daily production by gravities of the Gulf Refining Co., La., and others	55	40
Plaintiff's Exhibit "D"—Pages 1, 2, and 3 from Information Circular, Department of Commerce, Bureau of Mines, No. 6114, survey of gravities of domestic crudes	60	45
Plaintiff's Exhibit "E"—Pages 44 and 46 from The Oil Weekly of June 14, 1929, showing crule oil price quotations	63	48
Plaintiff's Exhibit—Page 123 from eighth biennial report of the department of conservation of the State of Louisiana, 1926-1928	65	49
Respondent's Exhibit "Conway 1"—Pages 116 and 117 from eighth biennial report of the department of conservation of the State of Louisiana, 1926-1928	66	50
Respondent's Exhibit "Conway 2"—Statement of crude oil production of Louisiana for 1928	67	52
Respondent's Exhibit "Conway 3 III-a"—Excerpt from Magnolia Pipe Line Company tariff	68	54
Respondent's Exhibit "Conway 3-a"—Joint pipe line tariff of Gulf Pipe Line Company and Gulf Refining Company of Louisiana	70	55
Respondent's Exhibit "Conway 4"—Magnolia Pipe Line Company, Texas local tariff No. A-5.	72	56
Respondent's Exhibit "Conway 5 III-b"—Gulf Refining Co. of Louisiana, pipe line tariff No. 4	74	58
Respondent's Exhibit "Conway 6 III-c"—Shreveport, El Dorado Pipe Line Co., Inc., pipe line tariff	76	59
Respondent's Exhibit "Conway 7"—The Texas Pipe Line Company, pipe line tariff	77	60
Respondent's Exhibit "Conway 8 III-d"—Standard Pipe Line Company, Inc., Louisiana local tariff No. 5	78	61
Respondent's Exhibit "Conway 9"—Page 141 from The Oil and Gas Journal of June 13, 1929, showing refinery and crude prices	79	62
Respondent's Exhibit "Conway 10"—Pages 138 and 139 from The Oil and Gas Journal of March 17, 1927, showing refinery and crude prices	80	62
Respondent's Exhibit—Pages 12 and 13 from Information Circular, Department of Commerce, Bureau of Mines, No. 6114	82	63
Opinion, Foster, J	84	65
Final decree	90	70
Petition for appeal and order allowing same	91	70

	Original	Print
Assignments of error	92	71
Supersedeas bond on appeal....(omitted in printing)..	95	
Narrative statement of evidence	97	74
Testimony of R. A. Burdick	97	74
C. D. Keene	99	76
E. Olivari	106	83
L. T. Garrett	108	84
W. N. Finnegan	111	87
C. R. Minor	112	88
J. R. Hall	114	90
Huey P. Long	115	91
Mrs. M. D. Carstarphen	119	94
Scott Heywood	119	95
W. H. Littlejohn	120	96
P. A. Cooley	121	96
Order approving statement of evidence	122	97
Præcipe for transcript of record	123	98
Clerk's certificate.....(omitted in printing)..	125	
Citation and service.....(omitted in printing)..	126	
Petition for and order extending time	127	100
Statement of points to be relied upon and designation to print entire record	131	101

[fols. a-1] [Caption omitted]

[fol. 2]

IN UNITED STATES DISTRICT COURT, EASTERN LOUISIANA

(In Equity.) No. 19,129

OHIO OIL COMPANY

v.

E. A. CONWAY, Supervisor of Public Accounts of the State of Louisiana

BILL OF COMPLAINT—Filed Aug. 6, 1928

To the Honorable District Court of the United States for the Eastern District of Louisiana:

Ohio Oil Company exhibits this bill of complaint against W. N. McFarland, Supervisor of Public Accounts of the State of Louisiana, and thereupon complainant says:

1

That it is a corporation, organized and chartered under the laws of the State of Ohio, and is a citizen of said State of Ohio.

2

That said W. N. McFarland is a citizen of the State of Louisiana, having his official domicile at Baton Rouge, in the Eastern District of Louisiana.

3

That complainant, in the conduct of its business, as authorized by its charter, is and has been for a number of years exploring for, drilling for and producing oil and gas in the State of Louisiana, in the Parishes hereinafter named, and selling therein such minerals as produced.

4

That complainant, since the beginning of its operations in the State of Louisiana, has paid all taxes of every kind levied by the State and Local authorities, including severance taxes, which latter taxes have, since the passage of Act No. 140 of 1922 of the Legislature of Louisiana, been levied at three per centum of the gross market value of the total production of oil and gas.

5

That upon all oil and gas which complainant has produced, or may produce during the present quarter—that is to say, the months of July, August and September—complainant will owe the State of Louisiana three per centum of the gross market value of the total production thereof; that complainant is willing and able to pay and desirous of paying such tax, which is the only tax demandable under any valid law of the State of Louisiana upon the production [fol. 3] of oil and gas; and that complainant desires to pay and insists upon the payment of a like tax upon the value of the total production of all oil and gas which it may produce during the subsequent quarters of this and subsequent years.

6

That, notwithstanding the fact that three per centum of the gross value of the production of oil and gas is the only tax legally demandable under the laws of the State of Louisiana, by reason of complainant's operations for oil and gas and its production thereof, yet the said W. N. McFarland, in his capacity as Supervisor of Public Accounts of the State of Louisiana, is going to demand of complainant sums largely in excess of such legal taxes, that such excess will amount to more than Ten Thousand Dollars ($10,000.00) for the current quarter, and for each subsequent quarter based upon complainant's present production; such excess amounting to not less than Fifty Thousand Dollars ($50,000.00) per annum.

7

That said McFarland has notified complainant and other producers of oil that he is going to demand such payment,

claiming authority and justification therefor under the terms of Act No. 5 of the Legislature of Louisiana of the year 1928.

8

That during the month of July, 1928, in the conduct of its said business, complainant produced in the several fields in which it operates, as follows:

In the Haynesville fields, in the Parish of Claiborne, 54,397.97 barrels of oil, of the value of $67,567.97; in the Cotton Valley field, in the Parish of Webster, 51,328.43 barrels of oil, of the value of $67,016.35; in the Pine Island fields, in the Parish of Caddo, 2,018.36 barrels of oil, of the value of $2,671.67; and in the Urania fields, in the Parish of LaSalle, 5,094.93 barrels of oil, of the value of $4,190.78.

Complainant shows that the severance taxes upon such production for the month of July under said Act No. 5, of 1928, would amount to more than Four Thousand Dollars ($4,000.00) more than the severance tax due by complainant [fol. 4] under the provisions of the present existing and valid statute Act No. 140 of 1922.

9

That under the terms of said Act No. 5 of 1928, the said W. N. McFarland, as Supervisor of Public Accounts, will, unless complainant pays the said illegal exaction, make and cause to be recorded in the mortgage records of the parishes wherein complainant is producing oil and gas a statement setting out the taxes claimed by the said Supervisor of Public Accounts to be due by complainant, which said statement will, under the terms of Act No. 140 of 1922, as amended by the said Act No. 5 of 1928, purport to operate as a first lien, privilege and mortgage on all the property of your complainant and to render said property subject to seizure and sale for the payment of said claim.

10

That the said Supervisor of Public Accounts, will, in the event of complainant's refusal to pay the said illegal demand, not only cause the said statement to be recorded as above set out, but, under the provisions of Act No. 140 of

1922, as amended by the said Act No. 5 of 1928, direct the Sheriff and Ex-Officio Tax Collector of each parish wherein complainant is producing oil and gas to seize and sell, for the payment of said claim, any and all property belonging to complainant which may be found within the territorial limits of such parishes, which such sale will be conducted by the Sheriff and Ex-Officio Tax Collector of each such parish upon request by the said Supervisor of Public Accounts, not only to pay the amount of the claim asserted by the said Supervisor of Public Accounts, but also to pay a penalty of two per centum per month on such claim and all other penalties provided for in the general revenue laws of the State of Louisiana.

11

That under said Act No. 5 of 1928, as it purports to amend Act No. 140 of 1922, it is made the duty of the Supervisor of Public Accounts to supervise and enforce the collection of all taxes asserted to be due under the provisions of that act, and full and complete administration of said act is [fol. 5] vested in said Supervisor of Public Accounts, with authority to compel all persons and corporations engaged in producing oil and gas to submit to him for examination their books, records and files, and to furnish to him any information required by him, with power on his part to compute the taxes and to levy penalties.

12

That for the purpose of carrying on its operations for producing petroleum in each of the parishes above named complainant has maintained for more than five years last past offices and headquarters, under whose management and supervision its operations for drilling and production have been conducted, and that in connection with said business it has expended large sums of money in each of said parishes, amounting in the aggregate to several millions of dollars; and that it will for many years to come continue to conduct said business in each of said parishes, involving very large outlays of money.

13

That in all of the parishes of Louisiana, operations for drilling for and producing oil are conducted by the same

processes, and that no substantial distinction exists between the business or occupation or means of producing oil in the various fields of the State.

14

That the oil produced by complainant in the Cotton Valley field is of 37 to 40 gravity, of the market value of $1.30 to 31.5 which has a market value of 75 cents per barrel, and is under said Act No. 5 of 1928, taxed at the rate of five cents per barrel or 6⅔ per cent of its value, and oil of the gravity of 47 and above, ranging in value from $1.61 to $1.76, which under said act is taxed at the rate of eleven cents per barrel, or 6½ per cent of its value.

That the oil produced by complainant in the Pine Island field is of 37 to 49 gravity, of the market value of $1.30 to $1.34 per barrel, taxed at the rate of ten cents per barrel, or 7.5 per cent of its value.

That the oil produced by complainant from the Urania field is of 20 gravity, of the market value of 75 cents per barrel, taxed under said act at four cents per barrel, or 5.5 per cent of its value.

[fol. 6] That the oil produced by complainant from the Haynesville field is from 33 to 36 gravity, of the market value of $1.19 to $1.25 per barrel, taxed under said act at the rate of eight cents per barrel, or 6.5 per cent of its value.

15

That very little oil is produced in South Louisiana of a gravity of more than 28, and no oil of a gravity of more than 31; that South Louisiana oil of a gravity below 28 has a market price and value of $1.15 to $1.20 per barrel, and such oil from 28 to 31 gravity, of from $1.23 to $1.27 per barrel.

That said Act No. 5 of 1928, imposes a tax upon oil of 28 gravity and below of four cents per barrel, and upon oil of 28 and below 31, of four and a quarter cents per barrel, making a practically uniform burden upon such oil of 3.4 per cent.

16

Complainant shows that said Act No. 5 of 1928, greatly increases the tax upon oil produced from the fields of North

Louisiana, wherein all of its business is located, the increase upon the production of oil by complainant being over 75 per cent in the Urania field, over 150 per cent in the Pine Island field, over 114 per cent in the Cotton Valley field, and over 116 per cent in the Haynesville field; whereas, said act increases the tax upon the production of oil in South Louisiana only in a small degree, such increase in the burden of taxation amounting to about 12 per cent, thereby imposing by purely arbitrary fiat almost the entire burden of increased taxation upon North Louisiana producers of oil and gas.

17

Complainant shows that the burden laid upon its production of oil from the fields in which it operates is the direct result of an intentional discrimination, imposed by said Act No. 5 of 1928, of a most unusual and arbitrary character, and wholly without reasonable or just basis, in this, to-wit:

(a) Because the burden laid by said act upon the production of oil by your complainant from the fields in which it operates in the State of Louisiana is grossly in excess of that laid upon and paid by producers of oil in other fields in the State of Louisiana;

[fol. 7] (b) Because the burden laid by the said act upon the production of oil by other persons and corporations engaged in identically the same occupation, and under the same circumstances, is made by said act to vary according to arbitrary standards, so that the occupation of complainant is subjected by said act to a burden of taxation more than twice as great as that of other persons engaged in identically the same occupation;

(c) Because the standard fixed in said act, levying the severance tax according to the gravity of the product severed, results in gross and unreasonable discrimination, in that such standard entirely ignores the market value of the oil produced, which varies widely in the different oil fields of the State of Louisiana; the net result thereof being to impose upon the oil produced by complainant a burden grossly excessive and discriminatory as compared with that laid by the statute upon oil produced from other fields in the State of Louisiana;

(d) Because the attempted classification of oil for the purpose of taxation in the said statute—to-wit, that of gravity—is wholly arbitrary, has no reasonable relation whatever to any ground of difference having a fair and substantial relation to the value of oil produced in the various fields of the State of Louisiana, and results in grossly discriminatory treatment as against complainant with respect to other persons similarly circumstanced;

(e) That said Act No. 5 of 1928, discriminates arbitrarily in favor of producers of oil in South Louisiana and against producers of oil in North Louisiana, that the burden imposed by it upon the business of complainant and other producers of oil in North Louisiana is grossly excessive and discriminatory as compared with the burden imposed by it upon the production of oil in South Louisiana; and

(f) That said act is based upon discrimination of a most unusual character, which particularly operates against this complainant, in that under the said statute it is compelled to pay a tax in respect of oil produced by it, the burden of which is grossly in excess of that paid by other producers of oil of identically the same gravity.

[fol. 8] 18

That because of the facts above set out said Act No. 5 of 1928 is null and void, in that same denies to complainant the equal protection of the laws in violation of the Fourteenth Amendment to the Constitution of the United States.

19

That said Act No. 5 of 1928 is unconstitutional, null and void, because it does not purport to levy a severance tax predicated upon either the quantity or the value of the product at the time and place of its severance, and therefore violates Section 21 of Article X of the Constitution of the State of Louisiana.

20

That the claims and threats of the said McFarland are based entirely upon said Act No. 5 of 1928, which said act, by reason of its unconstitutionality, affords no basis or

color for the acts of the said Supervisor of Public Accounts or his contentions, but renders the actions of the said McFarland illegal, and any seizure for the payment of the asserted taxes thereunder an unlawful act and a naked trespass.

21

That unless complainant does pay to the Tax Collectors of Caddo, Claiborne, La Salle and Webster Parishes, respectively, the amounts illegally claimed by said McFarland within thirty days from the 30th day of September, 1928, and thereafter, within thirty days from the expiration of each quarter-annual period, he will cause to be recorded in the mortgage records of each of said parishes a statement of the amount claimed by him to be due under the said unconstitutional enactment, Act No. 5 of 1928, and will claim and assert thereunder a lien and privilege on all the property of complainant in said parishes for the amount of the asserted taxes, penalties and costs, and will in addition, cause the respective Sheriffs and Ex-Officio Tax Collectors of said parishes, as his agents, to seize and sell all the property of complainant situated in said parishes for the payment of said asserted taxes and penalties.

22

That under the provisions of both Act No. 140 of 1922, [fol. 9] which is in force and effect, and said unconstitutional Act No. 5 of 1928, complainant must furnish, in duplicate, within thirty days from the expiration of each quarter, a sworn statement of the amount and value of its production; and that, despite the payment by complainant of the taxes due under Act No. 140 of 1922, the said McFarland will, every three months, cause to be recorded a statement which, under the said Act No. 5 of 1928, would operate as a lien and privilege on all the property of complainant and will follow same with seizure of all of complainant's property, in the manner provided in said statute.

23

That for the purpose of preventing the clouding of its titles through the recordation of such illegal liens, under

color of said unconstitutional statute, complainant has no remedy except the writ of injunction, nor has complainant any remedy for the recovery of such taxes should it pay same under the duress of the demand of the said Supervisor of Public Accounts.

24

That the law of Louisiana affords no remedy whatever for the recovery of taxes illegally exacted by the State, and complainant has no remedy except the process of injunction to prevent the seizure and sale of its property under the direction of the said Supervisor of Public Accounts.

25

That, unless the action of the said Supervisor of Public Accounts in the filing of such statements and the seizure and sale of complainant's property is prevented by writs of injunction, he will proceed to operate under the said unconstitutional statute; by interference with complainant's business, the filing of liens against its property and by causing the seizure of complainant's property by the sheriff of the several parishes in which it operates, and by the forced sale of said property to pay such illegal demand.

26

That by reason of the fact that complainant operates in several parishes, and further because of the fact that under said statute it is made complainant's duty to furnish a statement of its production every three months and be- [fol. 10] cause of the power purported to be vested in the Supervisor of Public Accounts to file a lien and proceed with seizure and sale of complainant's property every three months to satisfy the claim asserted under said unconstitutional statute, complainant cannot avoid a multiplicity of suit, except and unless this Honorable Court grant to complainant its writ of injunction to restrain said McFarland, as Supervisor of Public Accounts from claiming or asserting any taxes to be due under said Act No. 5 of 1928, and from recording or causing to be recorded in any parish wherein complainant is producing oil and gas any

statement wherein or whereby he asserts taxes to be due under said Act No. 5 of 1928, and/or from directing the Sheriff of any parish in the State of Louisiana to seize and/or sell any property of complainant to pay or satisfy any claim for taxes asserted to be due under the provisions of said Act No. 5 of 1928.

Wherefore your complainant prays that the Judge of this Court enter an order immediately calling to his assistance to hear and determine this application, two other judges, according to the provisions of the statutes of the United States; that an order be issued directing the said W. N. McFarland, Supervisor of Public Accounts and Honorable Huey P. Long, Governor of the State of Louisiana, and Honorable Percy Saint, Attorney General of said State, to show cause before this Honorable Court, as thereby constituted, at a time and place to be fixed by this Court, why writs of injunction should not issue herein restraining and prohibiting the said McFarland, as Supervisor of Public Accounts, from claiming or asserting as against complainant any taxes to be due under the provisions of Act No. 5 of 1928, and/or from recording or causing to be recorded in any parish wherein complainant is producing oil and/or gas in the State of Louisiana any statement claiming or asserting any taxes to be due by complainant under the provisions of said Act No. 5 of 1928, as well as from instructing or requesting the Sheriff of any parish wherein complainant is producing oil and/or gas in the State of Louisiana to seize and/or sell any property of complainant to pay or satisfy any tax claimed or asserted by said Supervisor of Public Accounts to be due under the provisions of said Act No. 5 of 1928; and that on the trial of said application, said writ issue.

And complainant further prays that the process of this Court as a court of equity do issue against said W. N. McFarland, Supervisor of Public Acounts of the State of [fol. 11] Louisiana, requiring him fully and completely to answer this bill of complaint; and that after due hearing on the merits, there by Judgment perpetuating the said writ of injunction and perpetually enjoining and restraining the said W. N. McFarland, Supervisor of Public Accounts, from in any manner asserting any claim against

complainant under the provisions of said Act No. 5 of 1928, and finally and definitely declaring said statute to be unconstitutional, null and void; and complainant further prays for all orders and decrees necessary or proper in the premises and for full and complete equitable relief.

(Signed) Roy L. Benoit, Thigpen, Herold, Lee & Cousin, Pugh, Grimmet & Boatner, Chas. H. Blish, Blanchard, Goldstein & Walker, Trisley Gilmer, J. S. Atkinson, Solicitors for Plaintiff.

Duly sworn to by Roy L. Benoit. Jurat omitted in printing.

[fol. 12] IN UNITED STATES DISTRICT COURT

ORDER TO SHOW CAUSE

On consideration of the foregoing verified Bill of Complaint, it is hereby ordered:

That in accordance with the provisions with the Statutes of the United States, Honorable Rufus E. Foster, Circuit Judge of the United States for the Fifth Circuit; and Honorable W. Lee Estes, Judge of the United States District Court for the Eastern District of Texas, are hereby called upon to sit with me as a United States District Court for the purpose of hearing and considering the said Bill of Complaint and the application for a preliminary injunction therein prayed for;

It is further ordered that the defendant W. N. McFarland, Supervisor of Public Accounts of the State of Louisiana, be and he is hereby ordered to show cause before this Court at the United States District Court Room in the City of Shreveport, on the 16th day of August, 1928, why the preliminary injunction prayed for by the plaintiff should not be granted;

It is further ordered that a copy of the foregoing bill and affidavit together with this order be served upon the said defendant W. N. McFarland, and also upon Honorable Huey P. Long, the Governor of Louisiana, and upon Honorable Percy Saint, Attorney General of the State of

Louisiana, and that in addition the regular process of subpœna issue.

Done officially in the City of New Orleans, on this the 6th day of August, 1928.

(Signed) Ben C. Dawkins, United States District Judge.

[fol. 13] IN UNITED STATES DISTRICT COURT

ANSWER—Filed August 16, 1929

Now, into this Honorable Court, comes the defendant, and for answer to the bill filed herein, avers:

1

The allegations of paragraph 1 are admitted.

2

The allegations of paragraph 2 are admitted.

3

The allegations of paragraph 3 are admitted.

4

For lack of sufficient information to justify a belief, the allegations of paragraph 4 are denied.

5

The allegations of paragraph 5 are denied, except as to matters of past laws, which speak for themselves.

6

The allegations of paragraph 6 are denied, except that defendant shows that, acting under due and legal laws, valid under the state and federal constitutions, in proper time and season, he will demand and attempt to collect the serevance taxes due the State of Louisiana, as set forth in Act 140 of 1922 as amended by Act 5 of 1928 of the Legislature of the State of Louisiana.

7

Allegations of paragraph 7 are denied, except that, in due course, defendant will notify the said defendant in accordance with law unless taxes are paid under the statutes as set further in paragraph 7.

8

For lack of sufficient information to justify a belief allegations of paragraph 8 are denied, except as to matters of law, which speak for themselves; that, however, no effort will be made to collect severance taxes under the amendment Act 5 of 1928, except on oil produced on and after [fol. 14] August 1, 1928.

9

Allegations of paragraph 9 are admitted except that it is denied that any act or exaction will be illegal, but the legality of the law and proposed future conduct is hereby alleged to be valid and regular.

10

Allegations of paragraph 10 are admitted, except that it is alleged that action to be taken by defendant will be proper when so taken.

11

Allegations of paragraph 11 are admitted.

12

For lack of information to justify a belief, the allegations of paragraph 12 are denied.

13

Allegations of paragraph 13 are denied.

14

For lack of information to justify a belief, the allegations of paragraph 14 are denied.

15

For lack of sufficient information to justify a belief, the allegations of paragraph 15 are denied.

16

Allegations of paragraph 16 are denied.

17

Allegations of paragraph 17 are denied.

18

Allegations of paragraph 18 are denied.

19

Allegations of paragraph 19 are denied.

20

Allegations of paragraph 20 are denied.

21

Allegations of paragraph 21 are admitted, except that defendant alleges the propriety and legality of his proposed actions in enforcing the severance tax laws and further [fol. 15] pleads the validity of said laws.

22

Admits that defendant will follow the wording and act in accordance with the statutes mentioned.

23

Allegations of paragraph 23 are denied.

24

Allegations of paragraph 24 are denied.

25

Allegations of paragraph 25 are denied.

26

Allegations of paragraph 26 are denied.

27

In further answer to this petition, your defendant shows that it is provided by the Constitution of the State of Louisiana, as follows:

"Taxes may be levied on natural resources severed from the soil or water, to be paid proportionately by the owners thereof at the time of severance. Such natural resources may be classified for the purpose of taxation and such taxes predicated upon either the quantity or value of the product at the time and place where it is severed. No severance tax shall be levied by any parish or other local subdivision of State." "Sec. 21 Article X."

That acting under the said Constitutional authority, the Legislature of Louisiana in the year 1922, enacted a Severance Tax, later known as Act 140 of 1922, to which reference is hereby specifically made.

That the said act was contested by the Courts and its validity upheld by the Supreme Court of the State of Louisiana and the Supreme Court of the United States.

That acting further under the authority of the said Constitution of Louisiana, in the year, 1928, the Legislature of Louisiana, by Act 5 of 1928, amended certain section of Act 140 of 1922, in and by which it assessed a tax on oil severed from the soil, according to the gravity baume of said oil.

That the plan, method and enactment contained in said amendment, Act 5 of 1928, was in all manners and respects fair, proper and valid, and in accordance with the Constitution of the State of Louisiana and the Constitution of the United States.

[fol. 16] That while the said State of Louisiana is not required to particularly respect classifications on basis of value, that, however, as a rule, to which there is slight, if any, exception, the gravity of oil severed from the soil is almost wholly controlling on the question of its value.

As an example, there is copied from The Oil Weekly, the posted prices for oil in the Homer, Haynesville, Caddo,

Eldorado, DeSoto, Crichton and Cotton Valley Oil fields of the State of Louisiana, as of May 25, 1928, which are prices offered by the said plaintiff company et als., as of May 25, 1928, to wit:

Below 28 gravity	$.91
28 to 28.9 gravity	.96
29 to 29.9 gravity	1.01
30 to 30.9 gravity	1.06
31 to 31.9 gravity	1.11
32 to 32.9 gravity	1.16
33 to 33.9 gravity	1.19
34 to 34.9 gravity	1.22
35 to 35.9 gravity	1.25
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.31
38 to 38.9 gravity	1.34
39 to 39.9 gravity	1.37
49 to 49.9 gravity	1.40
41 to 41.9 gravity	1.43
42 to 42.9 gravity	1.46
43 to 43.9 gravity	1.49
44 to 44.9 gravity	1.52
45 to 45.9 gravity	1.55
46. to 46.9 gravity	1.58
47 to 47.9 gravity	1.61
48 to 48.9 gravity	1.64
49 to 49.9 gravity	1.67
50 to 50.9 gravity	1.70
51 to 51.9 gravity	1.73
52 and Above	1.76

[fol. 17] However, there are some fluctuations, emergencies, geographical locations and transportation conditions which cause, from time to time, some exception in the value of oil by gravity, such as in the case of South Louisiana crude bordering on the deep waters of the gulf, or oil of an area near refining centers where there is a particular low freight rate, in some instances where there is an over-production of certain grades and gravities of oil, or a pipe line embargo in the oil field; but defendant shows that such exceptions are no more than are to be found in other com-

merce and do not effect the justice of the classification as followed by Act 5 of 1928.

Defendant alleges that Act 5 of 1928 is valid under the Constitution of the State of Louisiana, and under the Constitution and laws of the United States, and that he is entitled to proceed in accordance with the said act and to perform his duties to collect the tax levied thereunder.

The defendant properly shows that the method of classification and of taxes as prescribed in Act 5 of 1928, is not unfair, arbitrary or unreasonable, but that on the contrary it is in proper accord and sanctioned by the express language of our Constitution and in strict accord with the customary policies followed in commercial circles of this country.

Wherefore, defendant respectfully prays that the temporary restraining order issued herein be recalled and vacated; that the application of the plaintiff for temporary and permanent writ of injunction be denied and that the plaintiff's demand be rejected at its cost.

Prays for all further orders necessary and proper herein and for all further and general relief.

(Signed) Percy Saint, Attorney General. Huey P. Long, of Counsel.

[fol. 18] *Duly sworn to by W. N. McFarland. Jurat omitted in printing.*

[fol. 19] IN UNITED STATES DISTRICT COURT

MOTION FOR ORDER SUBSTITUTING E. A. CONWAY AS DEFENDANT IN PLACE OF W. N. MCFARLAND, SUPERVISOR OF PUBLIC ACCOUNTS, RESIGNED—Filed Oct. 5, 1928

In the above entitled and numbered cause, comes now the complainant, the Ohio Oil Company, and shows:

1

That it has heretofore filed in this Court its bill of complaint against W. N. MacFarland, Supervisor of Public Accounts wherein, in addition to other relief, it prayed for a

preliminary injunction against the said defendant, enjoining him from in any manner enforcing or attempting to enforce the provisions of Act No. 5 of 1928 of the Legislature of Louisiana, which purport to impose a severance tax upon producers of oil.

2

That said application for a preliminary injunction came on to be heard before this Court, constituted as a special court of three judges under the provisions of the statutes of the United States and that said motion for a preliminary injunction was argued and submitted, resulting in a judgment of this Court denying the said preliminary injunction.

3

That from the judgment denying the preliminary injunction complainant has taken an appeal to the Supreme Court of the United States which said appeal has been allowed by this Court, but that the appeal bond has not yet been filed.

4

Complainant now shows that said W. N. MacFarland has resigned as Supervisor of Public Accounts of the State of Louisiana, that his resignation has been duly accepted and that E. A. Conway has been appointed and has qualified as successor to said MacFarland and now legally holds and occupies the office of Supervisor of Public Accounts.

[fol. 20] 5

Complainant shows that it is entitled to have this cause continued and maintained against the said Conway as successor to the said MacFarland, and that there is substantial need for so continuing and maintaining the cause and obtaining an adjudication of the questions involved.

Wherefore complainant prays that an order be here and now entered by this Court substituting the said E. A. Conway, Supervisor of Public Accounts of the State of Louisiana, for the original defendant, W. N. MacFarland, Supervisor of Public Accounts, and that this cause be continued and maintained, both in respect of the appeal to the Supreme Court from the order of this Court denying

the preliminary injunction, and in respect of the remainder of the cause still untried in this Court, for all purposes against the said E. A. Conway, as successor in office of the said W. N. MacFarland,

(Signed) R. L. Benoit, Thigpen, Herold & Cousin, Solicitors for Complainant.

Having been served with copy of the foregoing motion, and being aware of the fact that E. A. Conway, has succeeded to the office formerly held by W. N. MacFarland, as Supervisor of Public Accounts, I formally consent to the substitution of E. A. Conway, for W. N. MacFarland as defendant in the within action.

(Signed) Percy Saint, Attorney General of Louisiana.

Oct. 2, 1928.

[fol. 21] IN UNITED STATES DISTRICT COURT

ORDER SUBSTITUTING PARTY DEFENDANT

Considering the foregoing motion and the consent of the Attorney General of Louisiana, it is now ordered that all proceedings in this cause be continued and maintained against E. A. Conway, as Supervisor of Public Accounts of the State of Louisiana as successor in office of W. N. MacFarland, the original defendant, and that said Conway be therefore substituted for all purposes in this cause as the defendant in this action.

Done and signed at New Orleans, Louisiana, on this 3rd day of October, 1928.

(Signed) Ben C. Dawkins, United States District Judge.

[fols. 22 & 23] Injunction Bond for $50,000, filed Apr. 10, 1929, omitted in printing.

[fol. 24] IN UNITED STATES DISTRICT COURT

DECREE GRANTING INTERLOCUTORY INJUNCTION—Filed Apr. 13, 1929

The application of the complainant for an interlocutory injunction coming on to be heard before this Court, under the mandate of the Supreme Court of the United States, it is hereby now ordered, adjudged, and decreed that said interlocutory injunction be and the same is hereby granted, and the defendant, E. A. Conway, Supervisor of Public Accounts of Louisiana, is hereby enjoined, restrained and strictly prohibited from proceeding against the complainant, The Ohio Oil Company, to enforce against it any of the provisions of Act No. 5 of the Louisiana Legislature of 1928.

And the Court, on consideration hereof, hereby orders and decrees that this injunction be and it is hereby granted upon the condition that the complainant (a) punctually and regularly pay the tax fixed by Act No. 140 of the Legislature of 1922, (b) give a bond in the penal sum of Fifty Thousand Dollars ($50,000.00), to be approved by any one of the Judges of this Court, conditioned that, in the event the amendatory act is adjudged valid by a final decree, the complainant and its surety will be obligated to pay, with interest and without other penalty, such further amounts as may be necessary, with the prior payments, to satisfy the tax fixed by that act, and (c) prosecute the suit with reasonable expedition to a final decree.

Thus done and signed officially by the said Court, at the City of New Orleans, State of Louisiana, on this 10th day of April, 1929.

(Signed) Rufus E. Foster, United States Circuit Judge. Ben C. Dawkins, W. L. Estes, United States District Judges.

[fol. 25] IN UNITED STATES DISTRICT COURT

U. S. MARSHAL'S RETURN ON DECREE GRANTING INTERLOCUTORY INJUNCTION—Filed Apr. 20, 1929

Received by U. S. Marshal, New Orleans, La., April 15, 1929, and on the 16th day of the same month and year I served certified copy hereof on E. A. Conway, Supervisor

of Public Accounts of the State of Louisiana, by handing the same to him in person in the City of Baton Rouge, Louisiana.

(Signed) Victor Loisel, U. S. Marshal, by E. M. Kinler, Deputy U. S. Marshal.

[fol. 26] IN UNITED STATES DISTRICT COURT

ORDERS CONTINUING CAUSE

May 13, 1929.

On motion of Dudley L. Gilbeau, Solicitor for respondent, E. A. Conway, and Percy Saint, Attorney General of the State of Louisiana.

It is ordered that this cause fixed for trial this day, be continued until tomorrow at eleven o'clock A. M., counsel for complainant being present and assenting thereto.

[fol. 27] May 14, 1929.

On motion of Percy Saint, Attorney General of State of Louisiana, and Dudley L. Guilbeau, Solicitors for E. A. Conway, Supervisor of Public Account- for the State of Louisiana, respondents herein,

It is Ordered by the Court that this cause, fixed for trial this day be continued until Tuesday, June 25th, 1929, at eleven o'clock A. M., counsel for complainant being present and taking notice thereof.

[fol. 28] June 25, 1929.

Whereupon, after hearing the pleadings read, and evidence and testimony offered on behalf of the respective parties, the cause was continued until tomorrow morning at 10:30 o'clock.

[fol. 29] June 26, 1929.

This cause as continued from yesterday, was this day resumed, counsel for the respective parties being present and the trial was proceeded with.

Whereupon, after hearing further evidence and testimony offered on behalf of the parties the cause was continued until tomorrow June 27th, 1929, at elevn o'clock A. M.

[fol. 30] Minute entry of argument and submission June 27, 1929, omitted in printing.

[fol. 31] EXHIBIT ON BEHALF OF PLAINTIFF, "MARKED PLAINTIFF A-1", BEING STATEMENT OF SEVERANCE TAX PAID BY THE OHIO OIL COMPANY UNDER THE PRESENT LAW; ALSO AMOUNT WOULD HAVE PAID UNDER THE NEW LAW—Filed Jun. 27, 1929

Statement of Severance Tax Paid by the Ohio Oil Company from January 1, to July 1, 1928, Under the Present Law; also Amount Would Have Paid under the New Law

Field	Barrels	Gravity	Price	Value	Tax	New rate	Tax	Increase
Haynesville:								
January	4,808.34	33 to 33.9	$1.22	$5,866.17	$175.98	8¢ per bbl.	$384.67	$208.69
	37,872.51	34 to 34.9	1.24	46,961.91	1,408.86	8¢ " "	3,029.80	1,620.94
	20,939.96	35 to 35.9	1.26	26,384.35	791.53	8¢ " "	1,675.20	883.67
Total	63,620.81	.....	....	$79,212.43	$2,376.37	.....	$5,089.67	2,713.30
February	74.93	32 to 32.9	1.20	89.92	2.70	8¢ " "	5.99	3.29
	80.67	30 to 30.9	1.16	93.58	2.81	4½¢ " "	3.43	.62
	429.97	36 to 36.9	1.28	550.36	16.51	10¢ " "	43.00	26.49
	2,830.48	33 to 33.9	1.22	3,453.19	103.60	8¢ " "	226.44	122.84
	13,803.72	35 to 35.9	1.26	17,392.69	521.78	8¢ " "	1,104.30	582.52
	22,501.78	34 to 34.9	1.24	27,902.20	837.07	8¢ " "	1,800.14	963.07
	1,475.44	33 to 33.9	1.19	1,751.77	52.55	8¢ " "	118.04	65.49
	11,036.05	34 to 34.9	1.22	13,463.98	403.92	8¢ " "	882.88	478.96
	6,511.44	35 to 35.9	1.25	8,139.30	244.18	8¢ " "	520.92	276.74
Total	58,744.48	.....	....	$72,836.99	$2,185.12	.....	$4,705.14	2,520.02
March	168.37	31 to 31.9	1.11	186.89	5.61	5¢ " "	8.42	2.81
	7,177.50	33 to 33.9	1.19	8,541.22	256.24	8¢ " "	574.20	317.96
	36,600.20	34 to 34.9	1.22	44,652.24	1,339.57	8¢ " "	2,928.02	1,588.45
	20,425.71	35 to 35.9	1.25	25,532.13	765.96	8¢ " "	1,634.06	868.10
Total	64,371.78	.....	....	$78,912.48	$2,367.38	.....	$5,144.70	2,777.32

April	224.84	32 to 32.9	1.16	260.81	7.82	8¢ " "	17.99	10.17
	6,243.60	33 to 33.9	1.19	7,429.88	222.90	8¢ " "	499.49	276.59
	35,735.57	34 to 34.9	1.22	43,597.40	1,307.92	8¢ " "	2,858.85	1,550.93
	18,251.57	35 to 35.9	1.25	22,814.46	684.43	8¢ " "	1,460.13	775.70
Total	60,455.58	.....	....	74,102.55	2,223.07	.....	4,836.46	2,613.39
May	99.51	32 to 32.9	1.16	115.43	3.46	8¢ " "	7.96	4.50
	6,105.77	33 to 33.9	1.19	7,265.87	217.98	8¢ " "	488.46	270.48
	36,338.17	34 to 34.9	1.22	44,332.57	1,329.98	8¢ " "	2,907.05	1,577.07
	21,532.30	35 to 35.9	1.25	26,915.38	807.46	8¢ " "	1,722.58	915.12
Total	64,075.75	.....	....	$78,629.25	$2,358.88	.....	$5,126.05	$2,767.17
June	4,222.80	33 to 33.9	1.19	5,025.13	150.75	8¢ " "	337.82	187.07
	38,392.63	34 to 34.9	1.22	46,839.01	1,405.17	8¢ " "	3,071.41	1,666.24
	17,476.27	35 to 35.9	1.25	21,845.34	655.36	8¢ " "	1,398.10	742.74
Total	60,091.70	.....	....	73,709.48	2,211.28	.....	4,807.33	2,596.05
Grand totals	371,360.10	.....	....	$457,403.18	$13,722.10	.....	$29,709.35	15,987.25

Increase, 116¼%.

[fol. 32] Cotton Valley:

January	34,114.22	31.5	$.85	$29,381.23	$881.44	5¢ per bbl.	$1,705.71	$824.27
Total January	34,114.22	.....	....	29,381.23	881.44	.....	1,705.71	824.27
February	5,372.85	31.5	.85	4,566.92	137.01	" "	268.64	131.63
	25,429.70	31.5	.75	19,072.28	572.17	" "	1,271.48	699.31
Total February	30,802.55	.....	....	23,639.20	709.18	.....	1,540.12	830.94

EXHIBIT ON BEHALF OF PLAINTIFF, "MARKED PLAINTIFF A-1"—Continued

Field	Barrels	Gravity	Price	Value	Tax	New rate	Tax	Increase
March	32,326.44	31.5	.75	24,244.83	727.34	5¢ per bbl.	1,616.32	888.98
Total March	32,326.44	.....	....	24,244.83	727.34	.....	1,616.32	888.98
April	29,383.21	31.5	.75	22,037.41	661.12	5¢ per bbl.	1,469.16	808.04
	11,119.83	49 to 49.9	1.67	18,570.12	557.10	11¢ " "	1,223.18	666.08
	55,288.79	50 to 50.9	1.70	93,990.94	2,819.73	11¢ " "	6,081.77	3,262.04
	18,729.17	51 to 51.9	1.73	32,401.46	972.04	11¢ " "	2,060.21	1,088.17
	310.82	52	1.76	547.04	16.41	11¢ " "	34.19	17.78
Total April	114,831.82	.....	....	167,546.97	5,026.40	.....	10,868.51	5,842.11
May	31,576.18	31.5	.75	23,682.14	710.46	5¢ " "	1,578.81	868.35
	2,915.01	49 to 49.9	1.67	4,868.07	146.04	11¢ " "	320.65	174.61
	12,530.98	50 to 50.9	1.70	21,302.67	639.08	11¢ " "	1,378.41	739.33
	17,908.95	51 to 51.9	1.73	30,982.48	929.48	11¢ " "	1,969.98	1,040.50
	12,705.69	52	1.76	22,362.01	670.86	11¢ " "	1,397.63	726.77
Total May	77,636.81	.....	1.76	103,197.37	3,095.92	.....	6,645.48	3,549.56
June	26,434.47	31.5	.75	19,825.85	594.78	5¢ " "	1,321.72	726.94
	576.00	47 to 47.9	1.61	927.36	27.82	11¢ " "	63.36	35.54
	4,810.38	48 to 48.9	1.64	7,889.02	236.67	11¢ " "	529.14	292.47
	3,158.64	49 to 49.9	1.67	5,274.93	158.25	11¢ " "	347.45	189.20
	812.98	50 to 50.9	1.70	1,382.07	41.46	11¢ " "	89.43	47.97
	4,620.73	51 to 51.9	1.73	7,993.86	239.81	11¢ " "	508.28	268.47
	10,627.75	52	1.76	18,704.84	561.15	11¢ " "	1,169.05	607.90
Total June	51,040.95	.....	....	61,997.93	1,859.94	.....	4,028.43	2,168.49
Grand total	340,752.79	.....	....	$410,007.53	$12,300.22	.....	$26,404.57	$14,104.35

Increase 114.6%.

[fol. 33] Pine Island:

January	176.43	29 to 29.9	1.14	$201.13	$6.03	4½¢ per bbl.	$7.50	1.47
	1,238.00	37 to 37.9	1.30	1,609.40	48.28	10¢ " "	123.80	75.52
	355.42	39 to 39.9	1.34	476.26	14.29	10¢ "	35.54	21.25
Total	1,769.85	.....	....	$2,286.79	$68.60	.....	$166.84	98.24
February	103.89	40 to 40.9	1.36	141.29	4.23	10¢ " "	10.39	1.16
	175.33	39 to 39.9	1.34	234.94	7.05	10¢ " "	17.53	10.48
	1,408.13	37 to 37.9	1.30	1,830.57	54.92	10¢ " "	140.81	85.89
Total	1,687.35	.....	....	$2,206.80	$66.20	.....	$168.73	$102.53
March	481.64	39 to 39.9	1.37	659.85	19.80	10¢ " "	48.16	28.36
	1,564.79	37 to 37.9	1.31	2,049.87	61.50	10¢ " "	156.48	94.98
Total	2,046.43	.....	....	$2,709.72	$81.30	.....	$204.64	123.34
April	178.27	39 to 39.9	1.37	244.23	4.33	10¢ " "	17.83	10.50
	160.26	38 to 38.9	1.34	214.75	6.44	10¢ " "	16.03	9.59
	297.99	36 to 36.9	1.28	381.43	11.44	10¢ " "	29.80	18.36
	1,259.31	37 to 37.9	1.31	1,649.69	49.49	10¢ " "	125.93	76.44
Total	1,895.83	.....	....	$2,490.10	$74.70	.....	$189.59	114.89
May	485.15	39 to 39.9	1.37	664.66	19.94	10¢ " "	48.51	28.57
	1,440.54	37 to 37.9	1.31	1,887.10	56.61	10¢ " "	144.05	87.44
Total	1,925.69	.....	....	$2,551.76	$76.55	.....	$192.56	116.01
June	327.51	39 to 39.9	1.37	448.69	13.46	10¢ " "	32.75	19.29
	1,427.04	37 to 37.9	1.31	1,869.42	56.08	10¢ " "	142.70	86.62
Total	1,754.55	.....	....	$2,318.11	$69.54	.....	$175.45	105.91
Grand total	11,079.70	.....	....	$14,563.28	436.89	.....	1,097.81	660.92
							% of Increase	151.2.

EXHIBIT ON BEHALF OF PLAINTIFF, "MARKED PLAINTIFF A-1"—Continued

Field	Barrels	Gravity	Price	Value	Tax	New rate	Tax	Increase
[fol. 34] Urania:								
January	4,821.57	21	.75	$3,616.18	$108.48	4¢ per bbl.	$192.86	$84.38
February	5,418.65	21	.75	4,063.99	$121.92	" "	216.75	94.83
March	6,712.20	21	.75	5,034.15	151.02	" "	268.49	117.47
April	7,079.72	21	.75	5,309.78	159.29	" "	283.19	123.90
May	7,530.22	21	.75	5,647.66	169.43	" "	301.21	131.78
June	7,384.61	21	.75	5,538.46	166.15	" "	295.38	129.23
Total	38,946.97	.....	....	$29,210.22	$876.29	.....	$1,557.88	$681.59

Increase 77.9%.

[fol. 35] Summary by Months

1928 Month	Barrels	Value	Tax	New tax	Increase
January:					
Haynesville	63,620.81	$79,212.43	$2,376.37	$5,089.67	$2,713.30
Cotton Valley	34,114.22	29,381.23	881.44	1,705.71	824.27
Pine Island	1,769.85	2,286.79	68.60	166.84	98.24
Urania	4,821.57	3,616.18	108.48	192.86	84.38
Total January	104,326.45	114,496.63	3,434.89	7,155.08	3,720.19
February:					
Haynesville	58,744.48	72,836.99	2,185.12	4,705.14	2,520.02
Cotton Valley	30,802.55	23,639.20	709.18	1,540.12	830.94
Pine Island	1,687.35	2,206.80	66.20	168.73	102.53
Urania	5,418.65	4,063.99	121.92	216.75	94.83
Total February	96,653.03	102,746.98	3,082.42	6,630.74	3,548.32

March:					
Haynesville	64,371.78	78,912.48	2,367.38	5,144.70	2,777.32
Cotton Valley	32,326.44	24,244.83	727.34	1,616.32	888.98
Pine Island	2,046.43	2,709.72	81.30	204.64	123.34
Urania	6,712.20	5,034.15	151.02	268.49	117.47
Total March	105,456.85	110,901.18	3,327.04	7,234.15	3,907.11
April:					
Haynesville	60,455.58	74,102.55	2,223.07	4,836.46	2,613.39
Cotton Valley	114,831.82	167,546.97	5,026.40	10,868.51	5,842.11
Pine Island	1,895.83	2,490.10	74.70	189.59	114.89
Urania	7,079.72	5,309.78	159.29	283.19	123.90
Total April	184,262.95	249,449.40	7,483.46	16,177.75	8,694.29
May:					
Haynesville	64,075.75	78,629.25	2,358.88	5,126.05	2,767.17
Cotton Valley	77,636.81	103,197.37	3,095.92	6,645.48	3,549.56
Pine Island	1,925.69	2,551.76	76.55	192.56	116.01
Urania	7,530.22	5,647.66	169.43	301.21	131.78
Total May	151,168.47	190,026.04	5,700.78	12,265.30	6,564.52
June:					
Haynesville	60,091.70	73,709.48	2,211.28	4,807.33	2,596.05
Cotton Valley	51,040.95	61,997.93	1,859.94	4,028.43	2,168.49
Pine Island	1,754.55	2,318.11	69.54	175.45	105.91
Urania	7,384.61	5,538.46	116.15	295.38	129.23
Total June	120,271.81	143,563.98	4,306.91	9,306.59	4,999.68
Grand total	762,139.56	$911,184.21	$27,335.50	$58,769.61	$31,434.11
Avg.	12,702	151,864	4,556	9,794	5,239

[fol. 36] **Grand Summary All Fields**

	Barrels	Value	Tax	New tax	Increase	Per cent increase
Haynesville	371,360.10	$457,403.18	$13,722.10	$29,709.35	$15,987.25	116.5
Cotton Valley	340,752.79	410,007.53	12,300.22	26,404.57	14,104.35	114.6
Pine Island	11,079.70	14,563.28	436.89	1,097.81	660.92	151.2
Urania	38,946.97	29,210.22	876.29	1,557.88	681.59	77.9
Grand total	762,139.56	$911,184.21	$27,335.50	$58,769.61	$31,434.11	114.9

[fol. 37] Statement of Severance Tax Paid by the Ohio Oil Company for Month of July, 1928, under the Present Law; Also Amount Would Have Paid under the New Law

Field	Barrels	Gravity	Price	Value	Tax	New rate	Tax	Increase
Haynesville	14,671.12	35 to 35.9	1.25	18,338.90	550.17	8¢ per bbl.	1,173.69	623.52
	37,237.19	34 to 34.9	1.22	45,429.37	1,362.88	8¢ " "	2,978.98	1,616.10
	5,698.39	33 to 33.9	1.19	6,781.08	203.43	8¢ " "	455.87	252.44
	213.48	32 to 32.9	1.16	247.64	7.43	8¢ " "	17.08	9.65
Grand total	57,820.18	.....	....	70,796.99	2,123.91	.....	4,625.62	2,501.71
								Increase, 117.7%.
[fol. 38] Cotton Valley	25,115.48	31.5	.75	18,836.60	565.09	5¢ per bbl.	1,255.78	690.69
	324.58	44 to 44.9	1.52	493.36	14.80	11¢ " "	35.70	20.90
	3,006.08	46 to 46.9	1.58	4,749.61	142.49	11¢ " "	330.67	188.18
	1,296.69	47 to 47.9	1.61	2,087.67	62.63	11¢ " "	142.64	80.01
	2,676.14	48 to 48.9	1.64	4,388.87	131.67	11¢ " "	294.38	162.71
	1,843.05	49 to 49.9	1.67	3,077.89	92.34	11¢ " "	202.74	110.40
	312.51	50 to 50.9	1.70	531.27	15.94	11¢ " "	34.38	18.44

	3,491.19	51 to 51.9	1.73	6,039.76	181.19	11¢ " "	384.03	202.84
	15,233.71	52	1.76	26,811.33	804.34	11¢ " "	1,675.71	871.37
Grand Total	53,299.43	.....	....	$67,016.36	$2,010.49	.....	$4,356.03	2,345.54
							Increase, 116.6%.	
[fol. 39] Pine Island	169.55	36	$1.28	$217.02	$6.51	10¢ per bbl.	$16.95	10.44
	1,391.76	37	1.31	1,823.21	54.70	10¢ per bbl.	139.18	84.48
	280.97	39	1.37	384.93	11.55	10¢ " "	28.10	16.55
	176.08	40	1.40	246.51	7.40	10¢ " "	17.61	10.21
Grand total	2,018.36	.....	....	$2,671.67	$80.16	.....	$201.84	121.68
							Increase, 151.7%.	
[fol. 40] Urania	1,224.19	21	.75	918.14	27.54	4¢ per bbl.	48.97	21.43
	3,233.88	21	.85	2,748.80	82.46	4¢ " "	129.36	46.90
Grand total	4,458.07	.....	....	3,666.94	110.00	.....	178.33	68.33
							Increase, 62.1%.	

[fol. 41]

Grand Summary

All Fields

Barrels	Value	Tax	New tax	Increase	Per cent increase
117,596.04	114,151.96	4,324.56	9,361.82	5,037.26	116.4

[fol. 42]

Exhibit Plaintiff "A-2,"

Being Statement, Prepared by Mr. Burdick, Showing Production of Plaintiff Company and Statement of Severance Tax Paid from August 1, 1928, to March 1, 1929, under Present Law; Also Amount Would Have Paid under Old Law—Filed Jun. 27, 1929

Statement of Severance Tax Paid by the Ohio Oil Company from August 1, 1928, to March 1, 1929, under the Present Law; Also Amount Would Have Paid under the Old Law

Field	Barrels	Gravity	Price	Value	3% tax	New rate	Tax	Increase
Haynesville:								
August	98.20	32 to 32.9	$1.16	$113.91	$3.42	8¢ per bbl.	$7.86	$4.44
	326.69	33 to 33.9	1.19	388.76	11.66	8¢ " "	26.14	14.48
	3,838.91	33 to 33.9	1.21	4,645.08	139.35	8¢ " "	307.11	167.76
	1,277.05	34 to 34.9	1.22	1,558.00	46.74	8¢ " "	102.16	55.42
	35,997.19	34 to 34.9	1.26	45,356.46	1,360.69	8¢ " "	2,879.78	1,519.09
	208.87	35 to 35.9	1.25	261.09	7.83	8¢ " "	16.71	8.88
	16,394.75	35 to 35.9	1.31	21,477.12	644.31	8¢ " "	1,311.58	667.27
Total	58,141.66	.....	.....	73,800.42	2,214.00	.....	4,651.34	2,437.34
September	5,798.24	33 to 33.9	1.21	7,015.87	210.48	8¢ " "	463.86	253.38
	37,059.27	34 to 34.9	1.26	46,694.68	1,400.84	8¢ " "	2,964.74	1,563.90
	10,731.39	35 to 35.9	1.31	14,058.12	421.74	8¢ " "	858.51	436.77
Total	53,588.90	.....	.....	67,768.67	2,033.06	.....	4,287.11	2,254.05

October	8,930.03	33 to 33.9	1.21	10,805.34	324.16	8¢ " "	714.40	390.24
	35,338.75	34 to 34.9	1.26	44,526.83	1,335.80	8¢ " "	2,827.10	1,491.30
	12,643.48	35 to 35.9	1.31	16,562.96	496.89	8¢ " "	1,011.48	514.59
Total	56,912.26	.....	.....	71,895.13	2,156.85	.....	4,552.98	2,396.13
November	5,440.05	33 to 33.9	1.21	6,582.46	197.47	8¢ " "	435.20	237.73
	39,463.38	34 to 34.9	1.26	49,723.86	1,491.72	8¢ " "	3,157.07	1,665.35
	7,931.39	35 to 35.9	1.31	10,390.12	311.70	8¢ " "	634.51	322.81
Total	52,834.82	.....	.....	66,696.44	2,000.89	.....	4,226.78	2,225.89
[fol. 43]								
December	243.19	32 to 32.9	$1.16	$282.10	$8.46	8¢ per bbl.	$19.46	$11.00
	5,585.48	33 to 33.9	1.21	6,758.43	202.75	8¢ " "	446.84	244.09
	39,650.82	34 to 34.9	1.26	49,960.03	1,498.80	8¢ " "	3,172.07	1,673.27
	7,024.52	35 to 35.9	1.31	9,202.12	276.06	8¢ " "	567.96	285.90
Total	52,504.01	.....	.....	66,202.68	1,986.07	.....	4,200.33	2,214.26
January	85.35	32 to 32.9	1.08	92.18	2.77	8¢ " "	6.83	4.06
	91.91	32 to 32.9	1.16	106.62	3.20	8¢ " "	7.35	4.15
	2,168.08	33 to 33.9	1.11	2,406.57	72.20	8¢ " "	173.45	101.25
	2,860.77	33 to 33.9	1.21	3,461.53	103.85	8¢ " "	228.86	125.01
	5,709.70	34 to 34.9	1.14	6,509.06	195.27	8¢ " "	456.78	261.51
	36,259.04	34 to 34.9	1.26	45,686.39	1,370.59	8¢ " "	2,900.72	1,530.13
	809.11	35 to 35.9	1.17	946.66	28.40	8¢ " "	64.73	36.33
	5,311.63	35 to 35.9	1.31	6,958.24	208.75	8¢ " "	424.93	216.18
Total	53,295.59	.....	.....	66,167.25	1,985.03	.....	4,263.65	2,278.62

EXHIBIT PLAINTIFF "A-2"—Continued

Field	Barrels	Gravity	Price	Value	3% tax	New rate	Tax	Increase
February	3,936.96	33 to 33.9	1.11	4,370.03	131.10	8¢ " "	314.96	183.86
	38,525.12	34 to 34.9	1.14	43,918.64	1,317.56	8¢ " "	3,082.01	1,764.45
	230.84	34 to 34.9	1.26	290.86	8.73	8¢ " "	18.47	9.74
	4,401.45	35 to 35.9	1.17	5,149.70	154.49	8¢ " "	352.12	197.63
Total	47,094.37	.....	.....	53,729.23	1 611.88	.....	3,767.56	2,155.68
Grand Total	374,371.61	.....	.....	466,259.82	13,987.78	.....	29,949.75	15,961.97

Increase, 114%.

[fol. 44] Statement of Severance Tax Paid by the Ohio Oil Company from August 1, 1928, to April 1, 1929, under the Present Law; Also Amount Would Have Paid under the Old Law

Field	Barrels	Gravity	Price	Value	3% tax	New rate	Tax	Increase
Cotton Valley:								
August	24,998.64	28.1 to 31	.75	18,748.98	562.47	.04½ per bbl.	1,062.44	499.97
	681.26	31.1 to 32	.75	510.95	15.33	.05 "	34.06	18.73
	270.31	32.1 to 36	.75	202.73	6.08	.08 "	21.62	15.54
	17,976.46	Above 43	1.76	31,638.57	949.16	.11 "	1,977.41	1,028.25
Total	43,926.67	.....	.....	51,101.23	1,533.04	.....	3,095.53	1,562.49
September	21,011.94	28.1 to 31	.75	15,758.96	472.77	.04½ "	893.01	420.24
	663.30	31.1 to 32	.75	497.48	14.92	.05 "	33.17	18.25
	327.91	32.1 to 36	.75	245.93	7.38	.08 "	26.23	18.85
	16,362.06	Above 43	1.76	28,797.23	863.92	.11 "	1,799.83	935.91
Total	38,365.21	.....	.....	45,299.60	1,358.99	.....	2,752.24	1,393.25

October	23,568.54	28.1 to 31	.75	17,676.41	530.29	.04½	"	1,001.66	471.37
	61.67	39 to 39.9	1.51	93.12	2.79	.10	"	6.17	3.38
	53.96	41 to 41.9	1.61	86.88	2.61	.10	"	5.40	2.79
	350.72	42 to 42.9	1.66	582.20	17.47	.10	"	35.07	17.60
	15,248.42	Above 43	1.76	26,837.22	805.12	.11	"	1,677.33	872.21
Total	39,283.31	.....	.....	45,275.83	1,358.28	.....		2,725.63	1,367.35
November	22,437.58	28.1 to 31	.75	16,828.19	504.85	.04½	"	953.60	448.75
	249.12	41 to 41.9	1.61	401.08	12.03	.10	"	24.91	12.88
	13,151.16	Above 43	1.76	23,146.04	694.38	.11	"	1,446.63	752.25
Total	35,837.86	.....	.....	40,375.31	1,211.26	.....		2,425.14	1,213.88
December	21,199.64	28.1 to 31	.75	15,899.73	476.99	.04½	"	900.98	423.99
	305.05	32.1 to 36	.75	228.79	6.86	.08	"	24.40	17.54
	64.27	40 to 40.9	1.56	100.26	3.01	.10	"	6.43	3.42
	116.10	41 to 41.9	1.61	186.92	5.61	.10	"	11.61	6.00
	310.52	42 to 42.9	1.66	515.46	15.46	.10	"	31.05	15.59
	4,170.50	Above 43	1.76	7,340.08	220.20	.11	"	458.76	238.56
Total	26,166.08	.....	.....	24,271.24	728.13	.....		1,433.23	705.10
[fol. 45]									
January	354.77	28 & Below	.75	266.08	7.98	.04	"	14.19	6.21
	20,563.47	28.1 to 31	.75	15,422.60	462.68	.04½	"	873.95	411.27
	60.12	40 to 40.9	1.32	79.36	2.38	.10	"	6.01	3.63
	114.10	41 to 41.9	1.61	183.70	5.51	.10	"	11.41	5.90
Total	21,092.46	.....	.....	15,951.74	478.55	.....		905.56	427.01
February	21,448.52	28.1 to 31	.75	16,086.39	482.59	.04½	"	911.56	428.97
	114.00	41 to 41.9	1.35	153.90	4.62	.10	"	11.40	6.78
Total	21,562.52	.....	.....	16,240.29	487.21	.....		922.96	435.75

EXHIBIT PLAINTIFF "A-2"—Continued

Field	Barrels	Gravity	Price	Value	3% tax	New rate	Tax	Increase
March	23,704.63	28.1 to 31	.75	17,778.47	533.35	.04½ "	1,007.45	474.10
	146.41	40 to 40.9	1.32	193.26	5.80	.10 "	14.64	8.84
Total	23,851.04	.....	.....	17,971.73	539.15	.....	1,022.09	482.94
Grand Total	250,085.15	.....	.....	256,486.97	1,694.61	.....	15,282.38	7,587.77

Increase, 99%.

[fol. 46] Statement of Severance Tax Paid by the Ohio Oil Company from August 1, 1928, to March 1, 1929, under the Present Law; Also Amount Would Have Paid under the Old Law

Field	Barrels	Gravity	Price	Value	3% tax	New rate	Tax	Increase
Pine Island:								
August	318.34	37 to 37.9	$1.31	$417.03	$12.51	10¢ per bbl.	$31.83	$19.32
	1,280.39	37 to 37.9	1.41	1,805.35	54.16	10¢ " "	128.04	73.88
	171.58	39 to 39.9	1.51	259.09	7.77	10¢ " "	17.16	9.39
	179.18	40 to 40.9	1.40	250.85	7.53	10¢ " "	17.92	10.39
Total	1,949.49	.....	.....	2,732.32	81.97	.....	194.95	112.98
September	1,266.20	37 to 37.9	1.41	1,785.34	53.56	10¢ " "	126.62	73.06
	355.39	39 to 39.9	1.51	536.64	16.10	10¢ " "	35.54	* 19.44
Total	1,621.59	.....	.....	2,321.98	69.66	.....	162.16	92.50
October	1,135.20	37 to 37.9	1.41	1,600.63	48.02	10¢ " "	113.52	65.50
	477.07	38 to 38.9	1.46	696.52	20.90	10¢ " "	47.71	26.81

	170.08	39 to 39.9	1.51	256.82	7.70	10¢ " "	17.01	9.31
	180.93	40 to 40.9	1.56	282.25	8.47	10¢ " "	18.09	9.62
Total	1,963.28	.....	.....	2,836.22	85.09	.....	196.33	111.24
November	1,258.98	37 to 37.9	1.41	1,775.16	53.25	10¢ " "	125.90	72.65
	173.51	40 to 40.9	1.56	270.68	8.12	10¢ " "	17.35	9.23
	107.55	41 to 41.9	1.61	173.16	5.20	10¢ " "	10.75	5.55
Total	1,540.04	.....	.....	2,219.00	66.57	.....	154.00	87.43
December	1,437.14	37 to 37.9	1.41	2,026.37	60.79	10¢ " "	143.71	82.92
	358.59	41 to 41.9	1.61	577.33	17.32	10¢ " "	35.86	18.54
Total	1,795.73	.....	.....	2,603.70	78.11	.....	179.57	101.46

[fol. 47]

January	334.14	40 to 40.9	$1.56	$521.26	$15.64	10¢ per bbl.	$33.41	$17.77
	179.14	40 to 40.9	1.32	236.46	7.09	10¢ " "	17.92	10.88
	638.22	37 to 37.9	1.23	785.01	23.55	10¢ " "	63.82	40.27
	958.40	37 to 37.9	1.41	1,351.34	40.54	10¢ " "	95.84	55.30
Total	2,109.90	.....	.....	2,894.07	86.82	.....	210.99	124.17
February	954.44	37 to 37.9	1.23	1,173.96	35.22	10¢ " "	95.44	60.22
	181.12	40 to 40.9	1.32	239.08	7.17	10¢ " "	18.11	10.94
	.15	40 to 40.9	1.56	.23	.01	10¢ " "	.02	.01
Total	1,135.71	.....	.....	1,413.27	42.40	.....	113.57	71.17
Grand Totals.....	12,115.74	.....	.....	17,020.56	510.62	.....	1,211.57	700.95

Increase, 137%.

EXHIBIT PLAINTIFF "A-2"—Continued

[fol. 48] Statement of Severance Tax Paid by the Ohio Oil Company from August 1, 1928, to March 1, 1929, under the Present Law; Also Amount Would Have Paid under the Old Law

Field	Barrels	Gravity	Price	Value	3% tax	New rate	Tax	Increase
Urania:								
August	315.00	Below 28°	$.75	$236.25	$7.09	4¢ per bbl.	$12.60	$5.51
	3,433.90	"	.85	2,918.82	87.56	4¢ " "	137.36	49.80
Total	3,748.90	.....	.....	3,155.07	94.65	.....	149.96	55.31
September	2,551.59	"	.85	2,168.85	65.07	4¢ " "	102.06	36.99
October	948.62	"	.85	806.33	24.19	4¢ " "	37.94	13.75
November	685.33	"	.85	582.53	17.48	4¢ " "	27.41	9.93
	2,628.18	"	.90	2,365.36	70.96	4¢ " "	105.13	34.17
Total	3,313.51	.....	.....	2,947.89	88.44	.....	132.54	44.10
December	3,155.46	"	.90	2,839.91	85.20	4¢ " "	126.22	41.02
January	1,185.91	"	.90	1,067.32	32.02	4¢ " "	47.44	15.42
Grand Total	14,903.99	.....	.....	12,985.37	389.57	.....	596.16	206.59

Increase, 53%.

[fol. 49] Statement of Severance Tax Paid by the Ohio Oil Company for March, 1929, under the Present Law; Also Amount Would Have Paid under Old Law

Field	Barrels	Gravity	Price	Value	3% tax	New rate	Tax	Increase
Haynesville:								
March	162.46	32 to 32.9	1.08	175.46	5.26	.08	13.00	7.74
	3,531.26	33 to 33.9	1.11	3,919.70	117.59	.08	282.50	164.91

	43,340.17	34 to 34.9	1.14	49,407.79	1,482.23	.08	3,467.21	1,984.98
	4,850.61	35 to 35.9	1.17	5,675.21	170.26	.08	388.05	217.79
Total	51,884.50	.....	.....	59,178.16	1,775.34	.....	4,150.76	2,375.42

Cotton Valley:

NOTE:—Cotton Valley Report for March on other sheet.

Pine Island:

March	1,581.67	37 to 37.9	1.23	1,945.45	58.36	.10	158.17	99.81
	358.85	40 to 40.9	1.32	473.68	14.21	.10	35.89	21.68
Total	1,940.52	.....	.....	2,419.13	72.57	.....	194.06	121.49

Haynesville Increase, 134%.
Pine Island Increase, 167%.
Cotton Valley Increase, 254%.

[fol. 50]

Summary by Months

1928	Barrels	Value	3% tax	New tax	Increase
August:					
Haynesville	58,141.66	73,800.42	2,314.00	4,651.34	2,437.34
Cotton Valley	43,826.67	51,101.23	1,533.04	3,095.53	1,562.49
Pine Island	1,949.49	2,732.32	81.97	194.95	112.98
Urania	3,748.90	3,155.07	94.65	149.96	55.31
Total August	107,766.72	130,789.04	3,923.66	8,091.78	4,168.12
September:					
Haynesville	53,588.90	67,768.67	2,033.06	4,287.11	2,254.05
Cotton Valley	38,365.21	45,299.60	1,358.99	2,752.24	1,393.25
Pine Island	1,621.59	2,321.98	69.66	162.16	92.50
Uraina	2,551.59	2,168.85	65.07	102.06	36.99
Total September	96,127.29	117,559.10	3,526.78	7,303.57	3,776.79

EXHIBIT PLAINTIFF "A-2"—Continued

Field	Barrels	Gravity	Price	Value	3% tax	New rate	Tax	Increase
October:								
Haynesville			56,912.26	71,895.13	2,156.85	4,552.98		2,396.13
Cotton Valley			39,283.31	45,275.83	1,358.28	2,725.63		1,367.35
Pine Island			1,963.28	2,836.22	85.09	196.33		111.24
Urania			948.62	806.33	24.19	37.94		13.75
Total October			99,107.47	120,813.51	3,624.41	7,512.88		3,888.47
November:								
Haynesville			52,834.82	66,696.44	2,000.89	4,226.78		2,225.89
Cotton Valley			35,837.86	40,375.31	1,211.26	2,425.14		1,213.88
Pine Island			1,540.04	2,219.00	66.57	154.00		87.43
Urania			3,313.51	2,947.89	88.44	132.54		44.10
Total November			93,526.23	112,238.64	3,367.16	6,938.46		3,571.30
December:								
Haynesville			52,504.01	66,202.68	1,986.07	4,200.33		2,214.26
Cotton Valley			26,166.08	24,271.24	728.13	1,433.23		705.10
Pine Island			1,795.73	2,603.70	78.11	179.57		101.46
Urania			3,155.46	2,839.91	85.20	126.22		41.02
Total December			83,621.28	95,917.53	2,877.51	5,939.35		3,061.84

[fol. 51]

1929	Barrels	Value	3% tax	New tax	Increase
January:					
Haynesville	53,295.59	66,167.25	1,985.03	4,263.65	2,278.62
Cotton Valley	21,092.46	15,951.74	478.55	905.56	427.01

PLAINTIFFS EXHIBIT "B"! being pages 128 and 130 from THE OIL WEEKLY of MAY 25, 1928, filed JUN 27 1929.

CRUDE OIL PRICE QUOTATIONS

CRUDE PRICE CHANGES

Findlay, Ohio, May 18 — Effective at the opening of the market today, The Ohio Oil Company advanced the market price of Kevin-Sunburst, Montana, crude, 15 cents per barrel, making the present price $1.65 per barrel at the wells.

CURRENT POSTINGS

EASTERN STATES

	May 23 1928
New York Transit	$2.80
Bradford District	2.80
National Transit	2.65
Southwest	2.65
Eureka	2.60
Buckeye	2.35
Macksburg	2.80
Gaines	2.60
Somerset	1.45
Cabell	1.35
Ragland	.95
Corning, 35-cent grade	1.45
Corning, 25-cent grade	1.55
Keister	1.10

CENTRAL STATES

Illinois	1.50
Indiana	1.32
Lima	1.55
Plymouth	1.23
Princeton	1.50
Waterloo	1.35
Wooster	1.57

WESTERN KENTUCKY

[illegible]

NORTH AND CENTRAL TEXAS

Ranger, North Texas, Mexia, Powell, Richland, Wortham, Currie, Moran, Nocona and Lytton Springs Crude
(Humble Oil and Refining Company and Gulf Refining Company)*

	May 23 1928
Below 25 gravity	.76
25 to 25.9 gravity	.81
26 to 26.9 gravity	.86
27 to 27.9 gravity	.91
28 to 28.9 gravity	.96
29 to 29.9 gravity	1.01
30 to 30.9 gravity	1.06
31 to 31.9 gravity	1.11
32 to 32.9 gravity	1.16
33 to 33.9 gravity	1.19
34 to 34.9 gravity	1.22
35 to 35.9 gravity	1.25
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.31
38 to 38.9 gravity	1.34
39 to 39.9 gravity	1.37
40 to 40.9 gravity	1.40
41 to 41.9 gravity	1.43
42 to 42.9 gravity	1.46
43 to 43.9 gravity	1.49
44 to 44.9 gravity	1.52
45 to 45.9 gravity	1.55
46 to 46.9 gravity	1.58
47 to 47.9 gravity	1.61
48 to 48.9 gravity	1.64
49 to 49.9 gravity	1.67
50 to 50.9 gravity	1.70
51 to 51.9 gravity	1.73
42 and above	1.76

* Magnolia Petroleum Company posts the schedule below on oil below 30 gravity and from 30 gravity up to 31.9. Beginning with 32 to 32.9, Magnolia's posting is the same as that of The Texas Company.

Below 30 gravity	.75
30 to 30.9 gravity	.90
31 to 31.9 gravity	1.05

Corsicana heavy is $1.00 posted by Magnolia.

SOUTH TEXAS

Mirando	1.00

SOMERSET
Grayburg

Below 33 gravity	1.05
33 to 33.9 gravity	1.07
34 to 34.9 gravity	1.09
35 to 35.9 gravity	1.11

Company advanced the market price of Kevin-Sunburst, Montana, crude, 15 cents per barrel, making the present price $1.65 per barrel at the wells.

CURRENT POSTINGS

EASTERN STATES

	May 23 1928
New York Transit	$2.80
Bradford District	2.80
National Transit	2.65
Southwest	2.65
Eureka	2.60
Buckeye	2.35
Macksburg	2.80
Gaines	2.60
Somerset	1.45
Cabell	1.35
Ragland	.95
Corning, 35-cent grade	1.45
Corning, 25-cent grade	1.55
Keister	1.10

CENTRAL STATES

Illinois	1.50
Indiana	1.32
Lima	1.55
Plymouth	1.23
Princeton	1.50
Waterloo	1.35
Wooster	1.57

WESTERN KENTUCKY

Posted by Stoll Refining Company for crude from Allen, Warren, Franklin, Davies, Barren, All grades 1.50

MID-CONTINENT

Prairie, Sinclair and Gulf

28 to 28.9 gravity	.96
29 to 29.9 gravity	1.01
30 to 30.9 gravity	1.06
31 to 31.9 gravity	1.11
32 to 32.9 gravity	1.16
33 to 33.9 gravity	1.19
34 to 34.9 gravity	1.22
35 to 35.9 gravity	1.25
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.31
38 to 38.9 gravity	1.34
39 to 39.9 gravity	1.37
40 to 40.9 gravity	1.40
41 to 41.9 gravity	1.43
42 to 42.9 gravity	1.46
43 to 43.9 gravity	1.49
44 to 44.9 gravity	1.52
45 to 45.9 gravity	1.55
46 to 46.9 gravity	1.58
47 to 47.9 gravity	1.61
48 to 48.9 gravity	1.64
49 to 49.9 gravity	1.67
50 to 50.9 gravity	1.70
51 to 51.9 gravity	1.73
52 and above	1.76

Lytton Springs Crude
(Humble Oil and Refining Company and Gulf Refining Company)*

	May 23 1928
Below 25 gravity	.76
25 to 25.9 gravity	.81
26 to 26.9 gravity	.86
27 to 27.9 gravity	.91
28 to 28.9 gravity	.96
29 to 29.9 gravity	1.01
30 to 30.9 gravity	1.06
31 to 31.9 gravity	1.11
32 to 32.9 gravity	1.16
33 to 33.9 gravity	1.19
34 to 34.9 gravity	1.22
35 to 35.9 gravity	1.25
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.31
38 to 38.9 gravity	1.34
39 to 39.9 gravity	1.37
40 to 40.9 gravity	1.40
41 to 41.9 gravity	1.43
42 to 42.9 gravity	1.46
43 to 43.9 gravity	1.49
44 to 44.9 gravity	1.52
45 to 45.9 gravity	1.55
46 to 46.9 gravity	1.58
47 to 47.9 gravity	1.61
48 to 48.9 gravity	1.64
49 to 49.9 gravity	1.67
50 to 50.9 gravity	1.70
51 to 51.9 gravity	1.73
52 and above	1.76

*Humble's postings stop at 44 and above, at $1.52.

NORTH AND CENTRAL TEXAS

(The Texas Company and Magnolia Petroleum Company)*

24 to 24.9 gravity	.76
25 to 25.9 gravity	.81
26 to 26.9 gravity	.86
27 to 27.9 gravity	.91
28 to 28.9 gravity	.96
29 to 29.9 gravity	1.01
30 to 30.9 gravity	1.06
31 to 31.9 gravity	1.11
32 to 32.9 gravity	1.16
33 to 33.9 gravity	1.19
34 to 34.9 gravity	1.22
35 to 35.9 gravity	1.25
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.31
38 to 38.9 gravity	1.34
39 to 39.9 gravity	1.37
40 to 40.9 gravity	1.40
41 to 41.9 gravity	1.43
42 to 42.9 gravity	1.46
43 to 43.9 gravity	1.49
44 to 44.9 gravity	1.52
45 to 45.9 gravity	1.55
46 to 46.9 gravity	1.58
47 to 47.9 gravity	1.61
48 to 48.9 gravity	1.64
49 to 49.9 gravity	1.67
50 to 50.9 gravity	1.70
51 to 51.9 gravity	1.73
42 and above	1.76

*Magnolia Petroleum Company posts the schedule below on oil below 30 gravity and from 30 gravity up to 31.9. Beginning with 32 to 32.9, Magnolia's posting is the same as that of The Texas Company.

Below 30 gravity	.75
30 to 30.9 gravity	.90
31 to 31.9 gravity	1.05

Corsicana heavy is $1.00 posted by Magnolia.

SOUTH TEXAS

Mirando	1.00

SOMERSET

Grayburg

Below 33 gravity	1.05
33 to 33.9 gravity	1.07
34 to 34.9 gravity	1.09
35 to 35.9 gravity	1.11
36 to 36.9 gravity	1.13
37 to 37.9 gravity	1.15
38 and above	1.17

GULF COAST

Grade "A" all companies	1.20
Gulf Coast Light Oil, below 25	1.15
25 to 25.9 gravity	1.17
26 to 26.9 gravity	1.19
27 to 27.9 gravity	1.21
28 to 28.9 gravity	1.23
29 to 29.9 gravity	1.25
30 to 30.9 gravity	1.27
31 to 31.9 gravity	1.29
32 to 32.9 gravity	1.31
33 to 33.9 gravity	1.33
34 to 34.9 gravity	1.35
35 to 35.9 gravity	1.37
36 to 36.9 gravity	1.39
37 to 37.9 gravity	1.41
38 to 38.9 gravity	1.43
39 to 39.9 gravity	1.45
40 and above	1.47

*Humble Oil & Refining Company's postings on Gulf Coast Light stop at 35 to 35.9. Its price on all crudes above 35 to $1.37 per barrel.

Magnolia Petroleum Company's postings stop at 31 to 31.9.

CALIFORNIA CRUDE OIL PRICES AT THE WELL

Following are the current prices offered by Standard Oil Company for crude oil at the well: (Price per barrel of 42 gallons in fields indicated.)

Gravity (degrees)	Signal Hill	Seal Beach	Huntington Beach	Inglewood	Olinda-Brea Canon	Athens-Rosecrans-Dominguez	Torrance	Richfield	Whittier La Habra	Montebello	Coyotte Hill	Santa Fe Springs	Newhall McKittrick Kern River	Midway Sunset Elk Hills	Buena Vista Hills	Lost Hills	Coalinga	Wheeler
14-14-9	$ .85	$ .85	$ .85	$ .85	$ .85	$ ..	$ .85	$ .85	$ .85	$ .85	$ .85	$ ..	$ .75	$ .75	$ .75	$ .75	$ .75	$ .75
15-15-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
16-16-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
17-17-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
18-18-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
19-19-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
20-20-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	..	.77	.77	.77	.76	.76
21-21-9	.86	.86	.86	.86	.86	..	.86	.86	.85	.85	.86	.85	..	.79	.79	.79	.77	.77
22-22-9	.87	.87	.87	.87	.87	..	.87	.87	.85	.85	.87	.85	..	.81	.81	.81	.78	.78
23-23-9	.88	.88	.88	.88	.88	..	.88	.88	..	.85	.88	.85	..	.83	.83	.83	.79	.79
24-24-9	.89	.89	.89	.89	.89	..	.89	.89	..	.85	.89	.85	..	.85	.85	.85	.80	.80
25-25-9	.90	.90	.90	.90	.90	.90	.90	.90	..	.86	.90	.86	..	.37	.87	.87	.81	.81
26-26-9	.92	.92	.92	.92	.92	.92	.92	.92	..	.87	.91	.87	..	.89	.89	.89	.83	.82
27-27-9	.94	.94	.94	.94	.94	.94	.94	.94	..	.88	.92	.88	..	.91	.91	.91	.85	.83
28-28-9	.96	.96	.96	.96	.96	.96	.96	.96	..	.89	.93	.89	..	.93	.93	.93	.87	..
29-29-9	.98	.98	.98	..	.98	.98	..	1.00	..	.91	.95	.93	..	.99	.99	.99	.91	..
30-30-9	1.00	1.00	1.00	..	1.00	1.00	..	..	..	..	..	.95	..	1.02	1.02	1.02	.93	..
31-31-9	1.03	1.03	1.03	..	..	1.03	..	..	..	..	..	.97	..	1.05	1.05	1.05	.95	..
32-32-9	1.06	1.06	1.06	..	..	1.06	..	..	..	..	..	.99	..	1.08	1.08	1.08	.97	..
33-33-9	..	..	..	..	..	1.09	..	..	..	..	..	1.01	..	..	..	1.11	.99	..
34-34-9	..	..	..	..	..	1.12	..	..	..	..	..	1.03	..	..	..	.	1.01	..
35-35-9	..	..	..	..	..	1.15	..	..	..	..	..	1.06	..	..	..	..	..	..
36-36-9	..	..	..	..	..	1.18	..	..	..	..	..	1.09	..	..	..	..	..	..
37-37-9	..	..	..	..	..	1.21	..	..	..	..	..	1.12	..	..	..	..	..	..
38-38-9	..	..	..	..	..	1.24	..	..	..	..	..	1.15	..	..	..	..	..	..
39-39-9	..	..	..	..	..	1.27	..	..	..	..	..	..	..	..	..	..	..	..
40-40-9	..	..	..	..	..	1.30	..	..	..	..	..	..	..	..	..	..	..	..
41-41-9	..	..	..	..	..	1.33	..	..	..	..	..	..	..	..	..	.	..	..
42-42-9	..	..	..	..	..	1.36	..											

	May 23 1928
MARKHAM	
The Texas Company	
All grades	1.00
LULING	
All grades	1.00
PANHANDLE	
GRAY COUNTY	
(Humble Oil and Refining Company, Magnolia Petroleum Company and Gulf Refining Company)	
Below 27 gravity	.60
27 to 27.9 gravity	.65
28 to 28.9 gravity	.70
29 to 29.9 gravity	.75
30 to 30.9 gravity	.80
31 to 31.9 gravity	.85
32 to 32.9 gravity	.90
33 to 33.9 gravity	.93
34 to 34.9 gravity	.96
35 to 35.9 gravity	.99
36 to 36.9 gravity	1.02
37 to 37.9 gravity	1.05
38 to 38.9 gravity	1.08
39 to 39.9 gravity	1.11
40 to 40.9 gravity	1.14
41 to 41.9 gravity	1.17
42 to 42.9 gravity	1.20
43 to 43.9 gravity	1.23
44 and above	1.26
WHEELER COUNTY	
(Humble Oil and Refining Company and Magnolia Petroleum Company)	
Below 29 gravity	.60
29 to 29.9 gravity	.65
30 to 30.9 gravity	.70
31 to 31.9 gravity	.75
32 to 32.9 gravity	.80
33 to 33.9 gravity	.83
34 to 34.9 gravity	.86
35 to 35.9 gravity	.89
36 to 36.9 gravity	.92
37 to 37.9 gravity	.95
38 to 38.9 gravity	.98
39 to 39.9 gravity	1.01
40 to 40.9 gravity	1.04
41 to 41.9 gravity	1.07
42 to 42.9 gravity	1.10
43 to 43.9 gravity	1.13
44 and above	1.16
CARSON-HUTCHINSON COUNTIES	
(Humble Oil and Refining Company, Magnolia Petroleum Company and Gulf Refining Company)	
Below 31 gravity	.60
31 to 31.9 gravity	.65
32 to 32.9 gravity	.70
33 to 33.9 gravity	.73
34 to 34.9 gravity	.76
35 to 35.9 gravity	.79
36 to 36.9 gravity	.82
37 to 37.9 gravity	.85
38 to 38.9 gravity	.88
39 to 39.9 gravity	.91
40 to 40.9 gravity	.94
41 to 41.9 gravity	.97
42 to 42.9 gravity	1.00
43 to 43.9 gravity	1.03
44 and above	1.06
WEST TEXAS	
(Humble, Gulf, Magnolia, The Marland Company and Southern Crude Oil Purchasing Company)*	
Crane- Upton, Crockett, Pecos and Winkler Counties, all grades	.60
(Magnolia Petroleum Company)	
Mitchell County	$ .80
Howard-Glasscock County (shallow)	.80
Howard-Glasscock County (deep)	.60
Col-Tex Refining Company	
Howard and Mitchell Counties	$ .80
WYOMING-MONTANA	
Wyoming	
Byron	1.33
Ferris	1.60
Elk Basin	1.33
Grass Creek	1.33
Rock Creek	1.25
Lost Soldier	.95
Lance Creek	1.33
Mule Creek	1.10
Notches	.65
Big Muddy	1.25
Osage	1.33
Hamilton Dome	.85
Pilot Butte	1.75
Torchlight-Greybull	1.33
Lander	.80
Simpson Ridge	.80
Rex Lake	1.10
South Casper Creek-Poison Spider	1.00
Salt Creek	
Midwest Refining Company	
29 to 29.9 gravity	1.14
30 to 30.9 gravity	1.16
31 to 31.9 gravity	1.18
32 to 32.9 gravity	1.20
33 to 33.9 gravity	1.22
34 to 34.9 gravity	1.24
35 to 35.9 gravity	1.26
36 to 36.9 gravity	1.28
37 and above	1.30
MONTANA	
Sunburst	$1.65
Cat Creek	1.33
Lake Basin	2.20
NEW MEXICO	
Artesia	1.00
Hogback	1.38
CANADA	
Oil Springs	2.02
Petrolia	1.95
LOUISIANA-ARKANSAS	
(All Companies)*	
Homer, Haynesville, Caddo, El Dorado, De Soto and Crichton and Cotton Valley**	
Below 28 gravity	.91
28 to 28.9 gravity	.96
29 to 29.9 gravity	1.01
30 to 30.9 gravity	1.06
31 to 31.9 gravity	1.11
32 to 32.9 gravity	1.16
33 to 33.9 gravity	1.19
34 to 34.9 gravity	1.22
35 to 35.9 gravity	1.25
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.31
38 to 38.9 gravity	1.34
39 to 39.9 gravity	1.37
40 to 40.9 gravity	1.40
41 to 41.9 gravity	1.43
42 to 42.9 gravity	1.46
43 to 43.9 gravity	1.49
44 to 44.9 gravity	1.52
45 to 45.9 gravity	1.55
46 to 46.9 gravity	1.58
47 to 47.9 gravity	1.61
48 to 48.9 gravity	1.64
49 to 49.9 gravity	1.67
50 to 50.9 gravity	1.70
51 to 51.9 gravity	1.73
52 and above	1.76

*Shreveport-Eldorado's postings stop at above 40 gravity.

**Below 36 gravity, the posting on Cotton Valley is 75 cents. From 36 to 52 and above the regular gravity schedule is followed.

	May 23 1928
STEPHENS	
(All Companies)	
Below 28	.85
28 to 28.9 gravity	.87
29 to 29.9 gravity	.89
30 to 30.9 gravity	.91
31 to 31.9 gravity	.93
32 and above	.95
SMACKOVER	
(All Companies)	
Below 24 gravity	.7[illegible]
24 and above	.90
Bellevue	1.25
Jennings	1.15
Vinton	1.30
Edgerly	1.30
Starks Dome	1.30
Urania	.75
Calion	.75

IMPORTS OF PETROLEUM AT PRINCIPAL UNITED STATES PORTS

American Petroleum Institute Figures (Barrels of 42 gallons)

	Week Ended May 12	Week En'd May 5
AT ATLANTIC COAST PORTS—		
Baltimore	63,000	323,000
Boston	.....	.....
New York	610,000	a53,6000
Philadelphia	146,000	395,000
Others	184,000	406,000
Total	1,003,000	1,660,000
Daily average	143,285	237,143
AT GULF COAST PORTS—		
Galveston district	40,000	.....
New Orleans and Baton Rouge	78,000	187,000
Port Arthur and Sabine district	.....	.....
Tampa	19,000	40,000
Total	137,000	227,000
Daily average	19,572	32,429
AT ALL UNITED STATES PORTS—		
Total	1,140,000	1,887,000
Daily average	162,857	269,572
Daily average four weeks ended	232,322	251,250

RECEIPTS OF CALIFORNIA OIL AT ATLANTIC AND GULF COAST PORTS

American Petroleum Institute Figures (Barrels of 42 gallons)

	Week Ended May 12	Week En'd May 5
AT ATLANTIC COAST PORTS—		
Baltimore	80,000	70,000
Boston	87,000	.....
New York	177,000	248,000
Philadelphia	179,000	282,000
Others	.....	.....
Total	523,000	600,000
Daily average	74,714	85,714
AT GULF COAST PORTS—		
Daily average	.....	.....
TOTAL—ATLANTIC AND GULF COAST PORTS	523,000	600,000
Daily average	74,714	85,714
Daily average four weeks ended	74,071	65,107
DISTRIBUTION OF TOTAL CALIFORNIA RECEIPTS IS AS FOLLOWS—		
Crude	169,000	90,000
Gasoline	354,000	345,000
Gas oil	.....	165,000
Total	523,000	600,000

(a) Revised

Pine Island	2,109.90	2,894.07	86.82	210.99	124.17
Urania	1,185.91	1,067.32	32.02	47.44	15.42
Total January	77,683.86	86,080.38	2,582.42	5,427.64	2,845.22
February:					
Haynesville	47,094.37	53,729.23	1,611.88	3,767.56	2,155.68
Cotton Valley	21,562.52	16,240.29	487.21	922.96	435.75
Pine Island	1,135.71	1,413.27	42.40	113.57	71.17
Urania	.....	.....	.....	.....	.....
Total February	69,792.60	71,382.79	2,141.49	4,804.09	2,662.60
March:					
Haynesville	51,884.50	59,178.16	1,775.34	4,150.76	2,375.42
Cotton Valley	23,851.04	17,971.73	539.15	1,022.09	482.94
Pine Island	1,940.52	2,419.13	72.57	194.06	121.49
Urania	.....	.....	.....	.....	.....
Total March	77,676.06	79,569.02	2,387.06	5,366.91	2,979.85

[fol. 52]

Summary by Fields

Field	Barrels	Value	3% tax	New tax	Increase	% increase
Haynesville	426,256.11	525,437.98	15,763.12	34,100.51	18,337.39	116%
Cotton Valley	250,085.15	256,486.97	7,694.61	15,282.38	7,587.77	99%
Pine Island	14,056.26	19,439.69	583.19	1,405.63	822.44	141%
Urania	14,903.99	12,985.37	389.57	596.16	206.59	53%
Grand total	705,301.51	814,350.01	24,430.49	51,384.68	26,954.19	110%
Average % mo	100757.	116336.	3490.	7626.	3850.	

(Here follows Plaintiff's Exhibit "B," side folios 53 and 54)

[fol. 55] PLAINTIFF EXHIBIT "C" 40

Being Statement Showing Daily Production by Gravities of the Gulf Refining Co. of La. and Others—Filed Jun. 27, 1929

Exhibit "A", Page 1.

Gulf Refining Company of La.

Statement Showing Estimated Daily Productionn by Fields in North Louisiana District

	Gravity	Total estimated production			
		Jan. 1, 1928, Bbls.	Aug. 6, 1928, Bbls.	Apr. 14, 1929, Bbls.	June 1, 1929, Bbls.
Oil purchased on gravity basis:					
Caddo Light: Gulf Refg. Co. of La.	40.5	2,421	2,330	1,879	1,867
Other Operators	40.0	9,479	7,420	6,221	6,233
		11,900	9,750	8,100	8,100
Haynesville: Gulf Refg. Co. of La.	33.9	100	93	116	107
Other Operators	34.0	6,650	5,957	5,284	5,193
		6,750	6,050	5,400	5,300

Homer: G. R. Co. of La.	36.9	906	903	858	850
Other Operators	35.0	3,644	3,447	3,092	3,250
		4,550	4,350	3,950	4,100
Decoto-Red River: G. R. Co. of La	40.5	1,054	1,173	1,100	993
Other Operators	41.0	3,146	2,877	2,850	2,907
		4,200	4,050	3,950	3,900
Pleasant Hill: Other Operators	41.0	850	600	750	500
Total on gravity basis		28,250	24,800	22,150	21,900
Percent on gravity basis		60.62%	60.49%	62.22%	62.75%
Oil purchased on flat price:	28.1 to				
Elm Grove: G. R. Co. of La	31.1	218	224	187	194
Other Operators	32.0	382	376	413	406
		600	600	600	600
Bellevue: G. R. Co. of La.	18.5	93	–0–	–0–	–0–
Other Operators	19.0	957	850	700	600
		1,050	850	700	600

PLAINTIFF EXHIBIT "C"—Continued

	Gravity	Total estimated production Jan. 1, 1928, Bbls.	Aug. 6, 1928, Bbls.	Apr. 14, 1929, Bbls.	June 1, 1929, Bbls.
Urania: Other Operators	20.0	7,850	6,900	5,850	5,850
Sub total		9,500	8,350	7,150	7,050
Per cent		39.38%	39.51%	37.78%	37.25%
Cotton Valley*: G. R. Co. of La.	28.1 31.1	156	132	121	130
Other Operators	30.0	4,644	4,518	2,929	2,570
		4,800	4,650	3,050	2,700
Caddo Heavy*: G. R. Co. of La.	Below 28	139	90	55	50
Other Operators	26.0	3,911	3,110	3,195	3,200
		4,050	3,200	3,250	3,250
Total on flat price		18,350	16,200	13,450	13,000
Per cent on flat price		39.38%	39.51%	37.78%	37.25%
Grand total		46,600	41,000	35,600	34,900

*NOTE.—Cotton Valley below 36 Gravity and Caddo Heavy below 28 Gravity are purchased at Flat Price. R-10.

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[fol. 56]

Exhibit "A," Page 2

Summary

	Total estimated production			
Purchased on Gravity Basis:	Jan. 1st, 1928, barrels	Aug 6th, 1928, barrels	April 14th, 1929, barrels	June 1, 1929, barrels
Gulf Refining Company of La	4,481	4,499	3,953	3,817
Other Operators	23,769	20,301	18,197	18,083
Total on Gravity Basis	28,250	24,800	22,150	21,900
Per Cent on Gravity Basis	60.62%	60.49%	62.22%	62.75%
Purchased on Flat Price:				
Gulf Refining Company of La	606	446	363	374
Other Operators	17,744	15,754	13,087	12,626
Total on Flat Price	18,350	16,200	13,450	13,000
Per Cent on Flat Price	39.38%	39.51%	37.78%	37.25%
Grand Total	46,600	41,000	35,600	34,900

(Here follows Exhibit B, side folios 57 and 58)

[fol. 59]

Exhibit "B," Page #3

Summary

	Total estimated production			
	Jan. 1st, 1928, barrels	Aug 6th, 1928, barrels	April 14th, 1929, barrels	June 1, 1929, barrels
Total Grade "A": Gulf Refg. Co. of La	145	133	259	206
Total Grade "A": Other Operators	6,772	8,122	12,531	9,865
Grand Total Grade "A"	6,917	8,255	12,790	10,071
Per Cent Grade "A"	43.57%	39.60%	61.35%	53.74%
Total Grade "B": Gulf Refg. Co. of La	1,767	3,138	1,885	1,870
Total Grade "B": Other Operators	7,192	9,422	6,136	6,765
Grand Total Grade "B"	8,959	12,560	8,021	8,635
Per Cent Grade "B"	56.43%	60.26%	38.48%	46.08%
Total not graded: Other Producers	0	30	35	35
Per cent not graded	....	.14%	.17%	.18%
Grand Total	15,876	20,845	20,846	18,741

[fol. 60] PLAINTIFF'S EXHIBIT "D",

Being Pages 1, 2, and 3 from Information Circular, Department of Commerce, Bureau of Mines, Number 6114, of Date April, 1929—Filed Jun. 27, 1929

Circular No. 6114, April, 1929

Information Circular, Department of Commerce, Bureau of Mines

Survey of Gravities of Domestic Crudes[1]

By G. R. Hopkins and A. B. Coons

The average gravity of the total crude petroleum produced in the United States during the year 1927 was 32.2° A. P. I., or 0.864 in terms of specific gravity. A similar study, made by the U. S. Geological Survey in 1921, gave the average gravity at that time as 32.0°.

To one who is accustomed to thinking of crude petroleum in terms of Oklahoma-Kansas and North Texas crudes it may be surprising that the average gravity for the entire country is no higher than 32.2°. The chief reason for this apparent discrepancy lies mainly in California production, which in 1927 amounted to over 25 per cent of the total, but which had an average gravity of only 24.1°. A factor of less importance was Arkansas, which, though on the decline as a producing State, exerted a material effect by reason of its average gravity of 21.6°, the lowest for any State. In view of the heavy production of light crude in the Seminole area of Oklahoma during 1927, it would appear that the average gravity should have shown more than a 0.2 per cent gain over 1921. That this did not occur was due to the fact that in the interim between 1921 and 1927 important heavy oil discoveries were made, notably the Smackover field of Arkansas.

The highest average gravity for any State was 48.5°, credited to New Mexico. That State can also boast the highest-gravity crude yet produced in quantity, that is, the crude from the Rattlesnake field in San Juan County. This crude has been assigned a gravity of 65° A. P. I., but has actually been tested as high as 75° A. P. I., corrected

[1] The Bureau of Mines will welcome reprinting of this article, but requests that the following footnote acknowledgment be used: "Printed by permission of the Director, U. S. Bureau of Mines. (Not subject to copyright.)"

for temperature.[2] Inasmuch as the gravity of the average motor fuel is about 60°, it is not hard to realize the difficulty experienced in handling such a "wild" crude.[2] Other States with high average gravities are Michigan, 44.0°; New York, 43.5°; West Virginia, 43.3°; and Pennsylvania, 42.0°. However, the combined output of these States was not large and had little effect on the average gravity for the country. The lowest gravity crude reported was that produced at Casmalia, Santa Barbara County, Calif. This crude has a gravity of 6.8° A. P. I., or 1.023 specific gravity, which indicates that it is heavier than water. Other low-gravity crudes are produced at Kern River, Calif., 14.1°, and Irma, Ark., 14.4°. The State of Texas, with the largest number of fields, had a varied assortment of gravities, with a range from below 20° to above 40° The average for the State was 32.4°, or practically the same as the national average.

[fol. 61] Little need be said regarding the production and price data given herewith, since these have already been discussed at great length. These figures were drawn from a number of sources, such as Government reports, and trade journals and associations, and in some respects are more complete than as published in the annual Mineral Resources chapters of this bureau.

The data relative to the per cent of gasoline and sulphur and to the general types of crudes were obtained from the various publications of this Bureau relating to the analyses of crude oils, principally from Bureau of Mines Bulletin 291, "Tabulated Analyses of Representative Crude Petroleums of the United States." This bureau has analyzed samples from practically all the producing fields in the United States, but in this publication the only data used were those pertaining to crudes of the same, or nearly the same, gravity as the estimated average.

Gasoline percentage recoveries for 78 samples are given herewith. These were obtained by laboratory methods as a part of the preparation of the reports above referred to on the analyses of crude oils. Although results obtained in the laboratory rarely correspond with those of actual practice, the gasoline-yield figures given herewith should

[2] Nowels, K. B., Development and relation of oil accumulation to structure in the Shiprock district of the Navajo Indian Reservation, New Mexico: Bull. of A. A. P. G., vol. 13, No. 2, Feb., 1929, p. 127.

serve as a good indication of the gasoline recovery to be expected from skimming. The production of the fields represented by the 78 samples was the equivalent of 29.4 per cent of the total production in 1927. If the gravity of each of these crudes is weighted on the basis of their production in 1927, the average gravity for all the samples works out to be 30.4°. If the per cent of gasoline in each sample is weighted in the same manner, the average gasoline content works out as 23.4 per cent. Since the average weighted gravity of the 78 samples is not far from the average for the entire country, it is probable that this computed figure of 23.4 per cent for gasoline content is close to the actual gasoline yield obtained in skimming operations. As a matter of fact, the yield of gasoline (natural gasoline deducted) by straight-run methods in 1927 was 24 per cent of the total crude run.

In general, the higher the gravity the higher the gasoline yield. However, no definite rule can be laid down as to the increment to be expected in gasoline percentage recovery for each degree rise in gravity. This is because of differences in chemical composition which, in addition to affecting gasoline recovery by means of its relation to gravity, also exerts an effect which is distinct from gravity. For example, a crude of 30° may contain a higher percentage of gasoline than one of 35°. Another, and perhaps a better way of estimating the probable increase in gasoline recovery for a 1° rise in gravity would be through a study of the differential for each degree gravity posted by the major crude buyers over a long period of time. The gravity basis as now used by the crude buyers in most fields is an attempt to make allowance for the higher gasoline content of high-gravity crudes, and over a period of time the price differential for each degree of gravity would be a rough measure of the increased percentage of gasoline that [fol. 62] might be expected.

The rapid increase in production of the West Texas fields has focused attention on the sulphur content of crudes as an item of great importance, because most West Texas

crudes are relatively high in sulphur compounds, making them difficult to refine and very corrosive to equipment. The 78 samples of crude selected for this study had a weighted average sulphur content of 1.16 per cent as compared with a weighted average of 1.90 per cent for West Texas. The highest per cent of sulphur for any of the samples was 4.13, reported for the Cat Canyon field of Santa Barbara County, Calif.; the lowest was 0.08 per cent, for Greybull field of Big Horn County, Wyo. Most of the Mid-Continent crudes are low in sulphur, the average being in the neighborhood of 0.25 per cent.

On the basis of composition or "base" there are three common types of crude, namely, paraffin-base crudes, asphalt or naphthene base crudes, and crudes of a mixed or intermediate base.

In general, paraffin-base crudes represent those which, on being chilled slowly, deposit a waxy material or "paraffin." Crudes of this type supply the major portion of the paraffin wax of commerce. Paraffin-base crudes are produced mainly in the Appalachian district, though crudes from other districts, for example, crudes from the Panhandle of Texas, are also classed as paraffin-base oils. Asphaltic base oils are those which contain little or no recoverable paraffin but usually contain asphaltic materials. Since they do not always contain asphalt the term "naphthene" is perhaps a better term for this class of oils. Asphaltic or naphthene base oils are produced mainly in California and in coastal Texas and Louisiana. Mixed or intermediate base crudes are those which can not be assigned to either of the above classes. A large portion of the crude produced in the Central States and the Mid-Continent district are of mixed or intermediate base.

A classification of crudes into these three grades, weighted as to production, provides a rough measure of the potential amounts of wax and asphalts which could be extracted if the demand warranted.

(Here follows Plaintiff's Exhibit "E," side folios 63 and 64)

Plaintiff Exhibit "E", being Pages 44 and 46 from THE OIL WEEKLY of date June 14, 1929, filed JUN 27, 1929.

CRUDE OIL PRICE QUOTATIONS

Revised June 11, 1929

EASTERN STATES
(Effective March 12, 1929)

Penna Grade Oil in New York Transit Lines (New York) $4.10
Brandford District Oil in National Transit Lines (Pennsylvania) 4.10
Penna Grade Oil in National Transit Lines (Pennsylvania) 4.00
Penna Crude Oil in Southwest Pennsylvania Lines (West Virginia) 4.00
Penna Grade Oil in Eureka Pipe Line Lines (Pennsylvania) 3.90
Penna Grade Oil in Buckeye Pipe Line Lines (Ohio) 3.85
Cabell Grade Oil in Eureka Pipe Line Lines (West Virginia) 1.35
Corning 35-cent Grade Oil in Buckeye Pipe Line Co.'s lines 1.80
Corning 25-cent Grade Oil in Buckeye Pipe Line Co.'s lines 1.75
Somerset Oil in Cumberland Pipe Line lines (Kentucky) 1.50
Ragland Grade Oil in Cumberland Pipe Line lines (Kentucky) (Effective Jan. 29, 1929) ..... .60
Keister (Pennsylvania) 1.20

CENTRAL STATES
(Effective May 21, 1929)
Posted by Ohio Oil Co.

31 to 31.9 gravity 1.15
32 to 32.9 gravity 1.25

From 33 to 44 gravity and above, Magnolia Petroleum Company prices are the same as those of Carter Oil Company.

MID-CONTINENT
(Effective May 20, 1929)
Carter Oil Company, Gulf Pipe Line Company, Sinclair Pipe Line Company, Prairie Oil and Gas Company and The Texas Company.

25 to 25.9 gravity ..... .90
26 to 26.9 gravity ..... .95
27 to 27.9 gravity 1.00
28 to 28.9 gravity 1.05
29 to 29.9 gravity 1.10
30 to 30.9 gravity 1.15
31 to 31.9 gravity 1.20
32 to 32.9 gravity 1.25
33 to 33.9 gravity 1.30
34 to 34.9 gravity 1.35
35 to 35.9 gravity 1.40
36 to 36.9 gravity 1.45
37 to 37.9 gravity 1.50
38 to 38.9 gravity 1.55
39 to 39.9 gravity 1.60
40 to 40.9 gravity 1.65
41 to 41.9 gravity 1.70
42 to 42.9 gravity 1.75
43 to 43.9 gravity 1.80
44 and above 1.85

WESTERN KENTUCKY
All grades 1.81

40 to 40.9 gravity 1.50
41 to 41.9 gravity 1.55
42 to 42.9 gravity 1.60
43 to 43.9 gravity 1.65
44 and above 1.70

WHEELER COUNTY
(Humble Oil and Refining Company and Magnolia Petroleum Company)

Below 30 gravity ..... .90
30 to 30.9 gravity ..... .95
31 to 31.9 gravity 1.00
32 to 32.9 gravity 1.05
33 to 33.9 gravity 1.10
34 to 34.9 gravity 1.15
35 to 35.9 gravity 1.20
36 to 36.9 gravity 1.25
37 to 37.9 gravity 1.30
38 to 38.9 gravity 1.35
39 to 39.9 gravity 1.40
40 to 40.9 gravity 1.45
41 to 41.9 gravity 1.50
42 to 42.9 gravity 1.55
43 to 43.9 gravity 1.60
44 and above 1.65

CARSON-HUTCHINSON COUNTIES
(Humble Oil and Refining Company, Magnolia Petroleum Company and Gulf Pipe Line Company)

Below 32 gravity ..... .90
32 to 32.9 gravity ..... .95
33 to 33.9 gravity 1.00
34 to 34.9 gravity 1.05

EASTERN STATES
(Effective March 12, 1929)

Penna Grade Oil in New York Transit Lines (New York)	$4.10
Bradford District Oil in National Transit Lines (Pennsylvania)	4.10
Penna Grade Oil in National Transit Lines (Pennsylvania)	4.00
Penna Crude Oil in Southwest Pennsylvania Lines (West Virginia)	4.00
Penna Grade Oil in Eureka Pipe Line Lines (Pennsylvania)	3.90
Penna Grade Oil in Buckeye Pipe Line Lines (Ohio)	3.85
Cabell Grade Oil in Eureka Pipe Line Lines (West Virginia)	1.35
Corning 35-cent Grade Oil in Buckeye Pipe Line Co.'s lines	1.80
Corning 25-cent Grade Oil in Buckeye Pipe Line Co.'s lines	1.75
Somerset Oil in Cumberland Pipe Line lines (Kentucky)	1.50
Ragland Grade Oil in Cumberland Pipe Line lines (Kentucky) (Effective Jan. 29, 1929)	.60
Keister (Pennsylvania)	1.20

CENTRAL STATES
(Effective May 21, 1929)
Posted by Ohio Oil Co.

Illinois	1.75
Indiana	1.57
Lima	1.80
Plymouth	1.28
Princeton	1.75
Waterloo	1.25
Wooster	1.90

MID-CONTINENT
(Effective May 21, 1929)
Magnolia Petroleum Company

Under 26	.70
26 to 26.9 gravity	.75
27 to 27.9 gravity	.85
28 to 28.9 gravity	.90
29 to 29.9 gravity	.95
30 to 30.9 gravity	1.05
31 to 31.9 gravity	1.15
32 to 32.9 gravity	1.25

From 33 to 44 gravity and above, Magnolia Petroleum Company prices are the same as those of Carter Oil Company.

MID-CONTINENT
(Effective May 20, 1929)
Carter Oil Company, Gulf Pipe Line Company, Sinclair Pipe Line Company, Prairie Oil and Gas Company and The Texas Company.

25 to 25.9 gravity	.90
26 to 26.9 gravity	.95
27 to 27.9 gravity	1.00
28 to 28.9 gravity	1.05
29 to 29.9 gravity	1.10
30 to 30.9 gravity	1.15
31 to 31.9 gravity	1.20
32 to 32.9 gravity	1.25
33 to 33.9 gravity	1.30
34 to 34.9 gravity	1.35
35 to 35.9 gravity	1.40
36 to 36.9 gravity	1.45
37 to 37.9 gravity	1.50
38 to 38.9 gravity	1.55
39 to 39.9 gravity	1.60
40 to 40.9 gravity	1.65
41 to 41.9 gravity	1.70
42 to 42.9 gravity	1.75
43 to 43.9 gravity	1.80
44 and above	1.85

WESTERN KENTUCKY

All grades	1.83

PANHANDLE
(Effective May 20, 1929)
GRAY COUNTY
(Humble Oil & Refining Company, Magnolia Petroleum Company, Gulf Pipe Line Company.

Below 29 gravity	.90
29 to 29.9 gravity	.95
30 to 30.9 gravity	1.00
31 to 31.9 gravity	1.05
32 to 32.9 gravity	1.10
33 to 33.9 gravity	1.15
34 to 34.9 gravity	1.20
35 to 35.9 gravity	1.25
36 to 36.9 gravity	1.30
37 to 37.9 gravity	1.35
38 to 38.9 gravity	1.40
39 to 39.9 gravity	1.45
40 to 40.9 gravity	1.50
41 to 41.9 gravity	1.55
42 to 42.9 gravity	1.60
43 to 43.9 gravity	1.65
44 and above	1.70

WHEELER COUNTY
(Humble Oil and Refining Company and Magnolia Petroleum Company)

Below 30 gravity	.90
30 to 30.9 gravity	.95
31 to 31.9 gravity	1.00
32 to 32.9 gravity	1.05
33 to 33.9 gravity	1.10
34 to 34.9 gravity	1.15
35 to 35.9 gravity	1.20
36 to 36.9 gravity	1.25
37 to 37.9 gravity	1.30
38 to 38.9 gravity	1.35
39 to 39.9 gravity	1.40
40 to 40.9 gravity	1.45
41 to 41.9 gravity	1.50
42 to 42.9 gravity	1.55
43 to 43.9 gravity	1.60
44 and above	1.65

CARSON-HUTCHINSON COUNTIES
(Humble Oil and Refining Company, Magnolia Petroleum Company and Gulf Pipe Line Company)

Below 32 gravity	.90
32 to 32.9 gravity	.95
33 to 33.9 gravity	1.00
34 to 34.9 gravity	1.05
35 to 35.9 gravity	1.10
36 to 36.9 gravity	1.15
37 to 37.9 gravity	1.20
38 to 38.9 gravity	1.25
39 to 39.9 gravity	1.30
40 to 40.9 gravity	1.35
41 to 41.9 gravity	1.40
42 to 42.9 gravity	1.45
43 to 43.9 gravity	1.50
44 and above	1.55

SOMERSET
Grayburg

Below 33 gravity	1.05
33 to 33.9 gravity	1.07
34 to 34.9 gravity	1.09
35 to 35.9 gravity	1.11
36 to 36.9 gravity	1.13
37 to 37.9 gravity	1.15
38 and above	1.17

CALIFORNIA CRUDE OIL PRICES AT THE WELL
(EFFECTIVE JANUARY 18, 1929)

Following are the current prices offered by Standard Oil Company for crude oil at the well: (Price per barrel of 42 gallons infields indicated)

Gravity	Ventura *	Signal Hill	Alamitos Heights-Seal Beach	Huntington Beach	Inglewood	Olinda-Brea Canon	Athens-Rosecrans Dominguez	Elwood † Terrace	Torrance	Richfield	Whittier La Habra	Montebello	Coyote Hills	Santa Fe Springs	Newhall McKittrick Kern River	Midway-Sunset Elks Hills	Buena Vista Hills	Lost Hills	Coalinga	Wheeler Ridge
14-14.9	$ .85	$ .70	$ .70	$ .70	$ .70	$ .70	$ ..	$ ..	$ .70	$ .70	$ .70	$ .70	$ .70	..	$ .50	$ .50	$ .50	$ .50	$ .50	$ .50
15-15.9	.85	.70	.70	.70	.70	.70	..	..	.70	.70	.70	.70	.70	..	.50	.50	.50	.50	.50	.50
16-16.9	.85	.70	.70	.70	.70	.70	..	..	.70	.70	.70	.70	.70	..	.50	.50	.50	.50	.50	.50
17-17.9	.85	.70	.70	.70	.70	.70	..	..	.70	.70	.70	.70	.70	..	.50	.50	.50	.50	.50	.50
18-18.9	.85	.75	.75	.75	.75	.75	..	..	.75	.75	.75	.70	.75	..	.50	.56	.56	.56	.56	.56
19-19.9	.85	.80	.80	.80	.80	.80	..	..	.80	.80	.80	.75	.80	..	.50	.62	.62	.62	.62	.62
20-20.9	.85	.85	.85	.85	.85	.85	..	..	.85	.85	.84	.80	.84	..	..	.68	.68	.68	.68	.68
21-21.9	.86	.89	.89	.89	.89	.89	..	..	.89	.89	.88	.85	.88	.89	..	.74	.74	.74	.74	.74
22-22.9	.87	.93	.93	.93	.93	.93	..	..	.93	.93	.91	.90	.91	.92	..	.80	.80	.80	.80	.80
23-23.9	.90	.97	.97	.97	.97	.97	..	..	.97	.97	..	.95	.94	.95	..	.85	.85	.85	.85	.85
24-24.9	.94	1.01	1.01	1.01	1.01	1.01	1.01	..	1.01	1.01	..	.98	.97	.98	..	.90	.90	.90	.88	.88
25-25.9	.98	1.05	1.05	1.05	1.05	1.05	1.05	..	1.05	1.05	..	1.01	1.00	1.01	..	.95	.95	.95	.91	.91
26-26.9	1.02	1.09	1.09	1.09	1.09	1.09	1.09	..	1.09	1.09	..	1.04	1.04	1.04	..	1.00	1.00	1.00	.94	.94
27-27.9	1.06	1.13	1.13	1.13	1.13	1.13	1.13	..	1.13	1.13	..	1.07	1.08	1.07	..	1.05	1.05	1.05	.98	.97
28-28.9	1.10	1.17	1.17	1.17	1.17	1.17	1.17	..	1.17	1.17	..	1.10	1.12	1.10	..	1.10	1.10	1.10	1.02	..
29-29.9	1.14	1.21	1.21	1.21	..	1.21	1.21	..	..	1.21	..	1.13	1.16	1.15	..	1.16	1.16	1.16	1.06	..
30-30.9	1.18	1.25	1.25	1.25	..	1.25	1.25	..	..	1.25	..	1.16	1.20	1.20	..	1.22	1.22	1.22	1.10	..
31-31.9	1.23	1.30	1.30	1.30	..	..	1.30	..	..	..	..	..	..	1.25	..	1.28	1.28	1.28	1.14	..
32-32.0	1.28	1.35	1.35	1.35	..	..	1.35	..	..	..	..	..	..	1.30	..	1.34	1.34	1.34	1.18	..
32-32.9	..	..	..	..	..	..	1.41	..	..	..	..	..	..	1.35	..	1.40	1.40	1.40	1.22	..
34-34.9	..	..	..	..	..	..	1.47	1.16	..	..	..	..	..	1.40	..	..	..	1.46	1.26	..
35-35.9	..	..	..	..	..	..	1.53	1.22	..	..	..	..	..	1.45	..	..	..	..	1.30	..
36-36.9	..	..	..	..	..	..	1.59	1.28	..	..	..	..	..	1.50	..	..	..	..	..	..
37-37.9	..	..	..	..	..	..	1.65	1.34	..	..	..	..	..	1.55	..	..	..	..	..	..
38-38.9	..	..	..	..	..	..	1.71	1.40	..	..	..	..	..	1.60	..	..	..	..	..	..
39-39.9	..	..	..	..	..	..	1.77	1.46	..	..	..	..	..	1.65	..	..	..	..	..	..
40-40.9	..	..	..	..	..	..	1.83	1.52	..	..	..	..	..	..	..	..	..	..	..	..
41-41.9	..	..	..	..	..	..	1.89	1.58	..	..	..	..	..	..	..	..	..	..	..	..
42-42.9	..	..	..	..	..	..	1.95	1.64	..	..	..	..	..	..	..	..	..	..	..	..

KETTLEMAN HILLS—55 degree Gravity and above $1.65 per barrel. *Union Oil Company †Changed March 18, 1929.

(See Next Page)

CRUDE OIL PRICE QUOTATIONS (*Continued from Page 44*)

WEST TEXAS
(Humble, Gulf, Magnolia, The Marland Company and Southern Crude Oil Purchasing Company)*

Crane-Upton, Crockett, Howard, Pecos and Winkler Counties and Lea County, N. Mex.

Below 25 gravity	.70
25 to 25.9 gravity	.74
26 to 26.9 gravity	.78
27 to 27.9 gravity	.82
28 to 28.9 gravity	.86
29 to 29.9 gravity	.90
30 to 30.9 gravity	.94
31 to 31.9 gravity	.98
32 to 32.9 gravity	1.02
33 to 33.9 gravity	1.06
34 to 34.9 gravity	1.10
35 to 35.9 gravity	1.14
36 and above	1.18

*Gulf does not post in Winkler County; Magnolia posts in Crane, Upton and Winkler Counties. Southern Crude Oil Purchasing Company posts only in Crane, Upton and Winkler Counties.

MARKHAM
The Texas Company
(Effective May 20, 1929)

All grades	$1.00

LULING

All grades	.90

NORTH AND CENTRAL TEXAS
(Effective May 21, 1929)
Ranger, North Texas, Mexia, Powell, Richland, Wortham, Currie, Moran, Nocona and Lytton Springs Crude
(Humble Oil and Refining Company)

Below 25	.85
25 to 25.9 gravity	.90
26 to 26.9 gravity	.95
27 to 27.9 gravity	1.00
28 to 28.9 gravity	1.05
29 to 29.9 gravity	1.10
30 to 30.9 gravity	1.15
31 to 31.9 gravity	1.20
32 to 32.9 gravity	1.25
33 to 33.9 gravity	1.30
34 to 34.9 gravity	1.35
35 to 35.9 gravity	1.40
36 to 36.9 gravity	1.45
37 to 37.9 gravity	1.50
38 to 38.9 gravity	1.55
39 to 39.9 gravity	1.60
40 to 40.9 gravity	1.65
41 to 41.9 gravity	1.70
42 to 42.9 gravity	1.75
43 to 43.9 gravity	1.80
44 and above	1.85

SOUTH TEXAS

Mirando	.90
Salt Flat	1.25

GULF COAST
(Effective May 21, 1929)

Grade "A" all companies	1.30
Gulf Coast Light Oil, below 25	1.15
25 to 25.9 gravity	1.18
26 to 26.9 gravity	1.21
27 to 27.9 gravity	1.24
28 to 28.9 gravity	1.27
29 to 29.9 gravity	1.30
30 to 30.9 gravity	1.33
31 to 31.9 gravity	1.36
32 to 32.9 gravity	1.39
33 to 33.9 gravity	1.42
34 to 34.9 gravity	1.45
35 to 35.9 gravity	1.48
36 to 36.9 gravity	1.51
37 to 37.9 gravity	1.54
38 to 38.9 gravity	1.57
39 to 39.9 gravity	1.60
40 and above	1.63

*Humble Oil & Refining Company's postings on Gulf Coast Light stop at 35 to 35.9. Its price on all crudes above 35 to $1.37 per barrel.

Magnolia Petroleum Company's postings stop at 31 to 31.9.

WYOMING-MONTANA
(Effective May 21, 1929)
Wyoming

Byron	1.33
Ferris	1.60
Elk Basin	1.65
Grass Creek	1.65
Rock Creek	1.40
Lost Soldier	1.05
Lance Creek	1.68
Mule Creek	1.20
Notches	.65
Big Muddy	1.43
Osage	1.38
Hamilton Dome	.85
Pilot Butte	1.75
Torchlight-Greybull	1.48
Lander	.80
Rex Lake	1.10
South Casper Creek-Poison Spider	1.00

Salt Creek
Midwest Refining Company

29 to 29.9 gravity	.90
30 to 30.9 gravity	.96
31 to 31.9 gravity	1.02
32 to 32.9 gravity	1.08
33 to 33.9 gravity	1.11
34 to 34.9 gravity	1.14
35 to 35.9 gravity	1.17
36 to 36.9 gravity	1.20
37 and above	1.23

MONTANA
(Effective May 24)

Sunburst	$1.75
Cat Creek	1.48
Lake Basin	2.20

NEW MEXICO

Artesia	1.08
Hogback	1.43

CANADA
(Effective May 21, 1929)

Oil Springs	2.27
Petrolia	2.20

LOUISIANA-ARKANSAS
(Effective May 22, 1929
Homer, Haynesville, Caddo, El Dorado, De Soto and Crichton and Cotton Valley*
(Atlantic Oil Producing Company, Standard of Louisiana, Magnolia Petroleum Company and The Texas Company.)

27 to 27.9 gravity	$1.00
28 to 28.9 gravity	1.05
29 to 29.9 gravity	1.10
30 to 30.9 gravity	1.15
31 to 31.9 gravity	1.20
32 to 32.9 gravity	1.25
33 to 33.9 gravity	1.30
34 to 34.9 gravity	1.35
35 to 35.9 gravity	1.40
36 to 36.9 gravity	1.45
37 to 37.9 gravity	1.50
38 to 38.9 gravity	1.55
39 to 39.9 gravity	1.60
40 to 40.9 gravity	1.65
41 to 41.9 gravity	1.70
42 to 42.9 gravity	1.75
43 to 43.9 gravity	1.80
44 gravity and above	1.85

*Shreveport-Eldorado's postings stop at above 40 gravity.

The posting on Cotton Valley is same as Caddo. From 36 to 52 and above the regular gravity schedule is followed.

The Texas Company pays North Texas gravity scale in North Louisiana.

STEPHENS
(All Companies)

Below 28 gravity	.90
28 to 28.9 gravity	.94
29 to 29.9 gravity	.98
30 to 30.9 gravity	1.02
31 to 31.9 gravity	1.06
32 gravity and above	1.10

SMACKOVER
(All Companies)

Below 24 gravity	.85
24 and above	1.00
Bellevue	1.30
Jennings	1.15
Vinton	1.30
Edgerly	1.30
Starks Dome	1.30
Urania	1.00
Calion	.75

IMPORTS OF PETROLEUM AT PRINCIPAL UNITED STATES PORTS
(Barrels of 42 gallons)

	Total Month May	Total Month April	Week Ended June 1	Week Ended May 25
AT ATLANTIC COAST PORTS—				
Baltimore	924,000	592,000	77,000	261,000
Boston	597,000	551,000	146,000	141,000
New York	4,278,000	4,117,000	778,000	1,211,000
Philadelphia	1,548,000	1,508,000	390,000	369,000
Others	692,000	677,000	137,000	319,000
Total	8,039,000	7,445,000	1,528,000	2,301,000
Daily Average	259,322	248,167	218,286	328,714
AT GULF COAST PORTS—				
Galveston Districts	207,000	206,000	.....	54,000
New Orleans and Baton Rouge	816,000	752,000	143,000	218,000
Port Arthur and Sabine District	93,000	311,000	.....	93,000
Tampa	41,000	45,000	.....	.....
Total	1,157,000	1,314,000	143,000	365,000
Daily Average	37,323	43,800	20,428	52,143
AT ALL UNITED STATES PORTS—				
Total	9,196,000	8,759,000	1,671,000	2,666,000
Daily Average	296,645	291,967	238,714	380,857

CALIFORNIA OIL RECEIPTS AT ATLANTIC AND GULF COAST PORTS
(Barrels of 42 gallons)

	Total Month May	Total Month April	Week Ended June 1	Week Ended May 25
AT ATLANTIC COAST PORTS—				
Baltimore	503,000	500,000	78,000	145,000
Boston	75,000	.....	.....	.....
New York	971,000	970,000	234,000	80,000
Philadelphia	335,000	197,000	.....	218,000
Others	66,000	267,000	.....	66,000
Total	1,950,000	1,934,000	312,000	509,000
Daily Average	62,903	64,467	44,571	72,714
AT GULF COAST PORTS—				
Total	.....	22,000	.....	.....
Daily Average	.....	733	.....	.....
AT ATLANTIC AND GULF COAST PORTS—				
Total	1,950,000	1,956,000	312,000	509,000
Daily Average	62,903	65,200	44,571	72,714
DISTRIBUTION OF TOTAL CALIFORNIA RECEIPTS IS AS FOLLOWS:				
Crude	95,000	150,000	.....	95,000
Gasoline	1,855,000	1,382,000	312,000	414,000
Kerosene Dist.	.....	150,000	.....	.....
Gas Oil	.....	274,000	.....	.....
Fuel Oil	.....	50,000	.....	.....
Total	1,950,000	1,956,000	312,000	509,000

[fol. 65] EXHIBIT ON BEHALF OF PLAINTIFF

BEING PAGE 123 FROM EIGHTH BIENNIAL REPORT OF THE DEPARTMENT OF CONSERVATION OF THE STATE OF LOUISIANA, 1926-1928—Filed Jun. 27, 1929

123

Table No. VII

Average Oil Prices, 1924-1925-1926-1927, Louisiana Fields

		Price per Barrel				Feb. 21
Gravity.		1924	1925	1926	1927	1928
North Louisiana:						
Caddo	35-37.9	1.46	1.87	2.13	1.47	1.28
Caddo	38+	$1.56	$1.97	$2.22	$1.73	$1.55
Caddo	32-34.9	1.36	1.77	2.00	1.37	1.19
Caddo	29-31.9	1.21	1.64	1.82	1.29	1.06
Caddo	26-28.9	....	....	1.47	1.22	.96
Caddo	26—	....	....	1.40	1.18	.91
Homer	35+	1.49	1.74	2.03	1.48	1.26
Homer	33-34.9	1.39	1.64	1.93	1.41	1.20
Homer	31-32.9	1.29	1.54	1.83	1.33	1.13
Homer	31—	1.14	1.39	1.70	1.30	1.09
Haynesville	33+	1.39	1.64	1.97	1.38	1.19
Haynesville	33—	1.29	1.54	1.88	1.33	1.15
Bull Bayou	38+	1.47	1.77	2.08	1.53	1.34
Bull Bayou	35-37.9	1.32	1.62	1.95	1.47	1.28
Bull Bayou	32-34.9	1.17	1.47	1.80	1.38	1.19
Chrichton	33-34.9	1.32	1.62	1.97	1.37	1.20
Bellvue	19-20	1.42	1.74	1.52	1.25	1.25
DeSoto	.....	1.52	1.82	2.18	1.44	1.31
Sabine	41	....	....	....	1.60	1.43
Cotton Valley	.....	.88	1.09	1.15	.98	.75
Urania	20.0-22.0	....	....	1.28	.94	.75
South Louisiana:						
Gulf Coast Heavy:						
Grade A	26—	1.61	1.66	1.52	1.30	1.20
Grade B	.....	....	....	1.38	1.27	1.15
Gulf Coast Light	29-29.9	....	....	1.70	1.43	1.25
Gulf Coast Light	28-28.9	....	....	1.65	1.40	1.23
Gulf Coast Light	27-27.9	....	....	1.60	1.37	1.21
Gulf Coast Light	26-26.9	....	....	1.55	1.33	1.19
Gulf Coast Light	25-25.9	....	....	1.50	1.30	1.17
Gulf Coast Light	25—	....	....	1.35	1.27	1.15

De Soto Parish near Naborton. Oil was discovered in Gulf Refining Company's No. 2 Jenkins in De Soto Parish in 1913. Red River's first oily well, No. 1 Marston, was completed in 1914 near Abington. The Chrichton Field, another of the group, was brought in as a major producing area early in 1915.

In the De Soto-Red River group the Nacatoch Sand

Being Pages 116 and 117 from Eighth Biennial Report of the Department of Conservation of the State of Louisiana, 1926-1928—Filed Jun. 27, 1929

Page 116

Table No. IV

Oil Production, South Louisiana Fields (in Barrels)

	1920*	1921	1922	1923	1924	1925	1926	1927	Total
Acadia Parish:									
Jennings Field.....	41,274,467	187,536	156,600	149,378	142,406	271,375	385,417	343,376	42,910,555
Calcasieu Parish:									
Edgerll Field.....	5,457,384	219,400	150,200	125,480	159,444	179,506	214,775	407,598	6,913,787
Vinton Field.....	15,462,321	1,256,600	1,495,800	1,943,230	1,930,621	2,409,930	2,215,270	1,811,139	28,524,911
Lockport Field.....	.....	.....	.....	.....	115,629	472,198	1,305,547	2,026,261	3,919,635
Starks Field.....	.....	.....	.....	.....	.....	.....	.....	264,113	264,113
Sulphur Mine.....	.....	.....	.....	.....	.....	.....	2,604	29,506	31,570
Cameron Parish:									
Hackberry or Kelso Bayou Field.....	.....	.....	.....	.....	.....	.....	.....	42,925	42,925
Sweet Lake Field....	.....	.....	.....	.....	.....	.....	10,755	76,465	87,220
Iberia Parish:									
Faussee Pointe or Lo-reauville Field.....	.....	.....	.....	.....	.....	.....	10,926	16,787	27,713
Jefferson Davis Parish:									
Welsh Field.....	354,776	.....	.....	.....	1,309	7,432	14,708	10,190	388,415
St. Martin Parish:									
Anse La Butte Field.	466,484	4,500	34,000	16,000	10,000	6,090	3,355	4,827	584,866
Total	63,015,432	1,708,536	1,836,600	2,234,088	2,359,409	3,346,441	4,162,817	5,032,387	83,695,710

*Prior to and including 1920.

Table No. V

Oil Production, North Louisiana Fields (in Barrels)

	1920*	1921	1922	1923	1924	1925	1926	1927	Total
Bossier Parish:									
Bellevue Field	.....	.....	1,479,905	2,250,057	1,745,980	1,171,358	829,394	476,231	7,952,925
Elm Grove Field	.....	.....	290,721	473,730	283,554	240,177	232,917	245,790	1,766,889
Caddo Parish:									
All subdivisions	82,085,848	5,391,166	4,231,555	3,998,593	4,251,319	4,087,673	4,669,421	5,703,434	114,419,009
Claiborne Parish:									
Haynesville Field	.....	2,964,972	20,299,911	10,905,194	6,160,607	4,771,337	3,439,064	2,631,817	51,172,902
Homer Field	24,177,001	12,736,884	6,293,809	3,801,938	2,891,580	2,345,000	2,105,255	1,751,989	56,103,456
De Soto Parish	12,608,300	719,000	531,000	429,000	353,000	431,000	427,850	444,450	15,943,600
Grant Parish:									
Urania Field	.....	.....	.....	.....	.....	.....	3,800	56,956	60,765
La Salle Parish:									
Urania Field	.....	.....	.....	.....	.....	16,708	4,049,444	3,556,276	7,622,428
Winn Parish:									
Urania Field	.....	.....	.....	.....	.....	.....	125,428	108,810	234,238
Red River Parish	21,494,340	2,844,000	1,778,000	1,560,665	1,231,000	937,000	912,920	945,730	31,703,655
Sabine Parish:									
Pleasant Hill Field	.....	.....	.....	.....	.....	.....	.....	226,700	226,700
Webster Parish:									
Cotton Valley Field	.....	.....	.....	.....	1,176,011	3,337,060	2,787,744	1,986,669	9,287,484
Total North La	140,365,489	24,656,022	34,904,901	23,419,177	18,093,051	17,337,313	19,583,237	18,134,852	296,494,044
Total South La	63,015,432	1,708,536	1,836,600	2,234,088	2,359,409	3,346,441	4,162,817	5,032,387	83,695,710
Total for State	203,380,921	26,364,558	36,741,501	25,653,265	20,452,460	20,683,754	23,746,054	23,167,239	380,189,754

*Prior to and including 1920.

EXHIBIT FILED ON BEHALF OF RESPONDENT, MARKED "CONWAY—2," BEING STATEMENT OF CRUDE OIL PRODUCTION OF LOUISIANA FOR 1928, FILED JUN. 27, 1929

State of Louisiana, Department of Conservation, Minerals Division

Crude Oil Production of Louisiana for 1928

North Louisiana

Parish	Field	Total for parish	
Bossier	Carterville	14,698.00 Bbls.	
	Bellevue	316,343.00 "	
	Elm Grove	220,226.00 "	
			551,267 Bbls.
Caddo	All subdivisions		4,805,744 "
Claiborne	Haynesville	2,175,315.00 Bbls.	
	Homer	1,529,660.00 "	
			3,704,975 "
DeSoto			429,820 "
Grant	Urania Field	35,653.00 Bbls.	
La Salle	Urania Field	2,447,476.00 "	
Winn	Urania Field	14,360.00 "	
			2,497,489 "
Red River	Bull Bayou	519,224.00 Bbls.	
	Critchton-Marston	417,284.00 "	
			936,508 "
Sabine	Pleasant Hill	189,786.00 Bbls.	
	Zwolle	1,500.00 "	

Webster	Cotton Valley			191,286	"
				1,720,046.	"
	Total—North Louisiana			14,837,136	Bbls.
	South Louisiana				
Acadia	Jennings			299,030	Bbls.
Calcasieu	Edgerly	359,522	Bbls.		
	Lockport	1,446,389	"		
	Starks	185,321	"		
	Sulphur Mine	913,460	"		
	Vinton	1,598,441	"		
				4,503,133	"
Cameron	Kalso Bayou	1,185,531	Bbls.		
	Sweet Lake	666,651	"		
				1,852,182	"
Ascension	McElroy or Sorrento			290,837	"
Iberia	Loreauville or Fausse Points			1,618	"
Jefferson Davis	Welsh			30,380	"
St. Martin	Anse LeButte	4,164	Bbls.		
	Bayou Boullion	199,534	"		
				203,698	"
	Total—South Louisiana			7,180,878	Bbls.
	Grand total for State			22,018,014	Bbls.

[fol. 68] EXHIBIT MARKED CONWAY 3-IIIa,

Being Excerpt from Magnolia Pipe Line Company Tariff—Filed Jun. 27, 1929

Conway 3-IIIa

Excerpt from Magnolia Pipe Line Company Local Pipe Line Tariff Applying on Crude Petroleum from Points on the Magnolia Pipe Line Company to Points on the Magnolia Pipe Line Company, as Shown Within.

The rates published in this tariff are the rates per barrel of 42 U. S. gallons each, for the interstate transportation by carrier's trunk pipe lines of crude petroleum subject to the regulations in effect at the time of shipment.

Issued January 30, 1929. Effective March 2, 1929.

Table of Rates

Rates in Cents per Barrel of 42 U. S. Gallons

Item No.	From	To	Rate
*	* * *	* * *	
17	Haynesville, Louisiana.....	Beaumont, Texas.....	30
18	Cotton Valley, Louisiana.....	Beaumont, Texas.....	30
19	Pine Island, Louisiana.....	Beaumont, Texas.....	20
20	Bull Bayou, Louisiana.....	Beaumont, Texas.....	20

General Rules

In addition to rates in Items 1 to 25, inclusive, all oil transported thereunder will be subject to a further gathering charge of 10¢ per barrel except from Mirando, Texas, where a gathering charge of 20¢ per barrel will be made.

On all deliveries to consignee's vessels or to consignee's tanks connected with pipe lines of Magnolia Pipe Line Company a further charge of 2½¢ per barrel will be made. No deliveries will be made to points not located on the trunk line of the Magnolia Pipe Line Company except under special contract therefor, for which an additional reasonable charge will be made, if such delivery is undertaken, [fol. 69] the shipper in all cases to provide, at his own expense, tanks for receiving the oil and connection between his tanks and the pipe line.

[fol. 70] EXHIBIT "CONWAY 3-a"

Being Joint Pipe Line Tariff of Gulf Pipe Line Company and Gulf Refining Company of Louisiana Fx. 2-No. 5— Filed —— —, ——

No Supplement to this Tariff will be issued except for the purpose of cancelling the Tariff.

G. P. L. Co. No. 23.

I. C. C. No. 23

Cancelling and Superseding I. C. C. No. 22

Gulf Pipe Line Company and Gulf Refining Company of Louisiana Fx. 2-No. 5 Joint Pipe Line Tariff

The rates published in this tariff are for the interstate transportation of crude petroleum, subject to the regulations of the above companies in effect at time of shipment, and apply

From the points established by the Gulf Refining Company of Louisiana for the reception of crude petroleum into its trunk lines in the oil fields in Caddo Parish, DeSoto Parish and Red River Parish, Louisiana;

To the points established by the Gulf Pipe Line Company for the delivery of crude petroleum at

Lucas, Texas, and

Port Arthur, Texas,

Rate per barrel, twenty-five cents.

And from the points established by the Gulf Refining Company of Louisiana for the reception of crude petroleum into its trunk lines in what are known as the Homer oil fields and the Haynesville oil field in Claiborne Parish, Louisiana,

To said points established by the Gulf Pipe Line Company for the delivery of crude petroleum at

Lucas, Texas, and

Port Arthur, Texas,

Rate per barrel, forty cents.

* And from the point established by the Gulf Refining Company of Louisiana for the reception of crude petroleum into its trunk lines at El Dorado, Arkansas,

To said points established by the Gulf Pipe Line Company for the delivery of crude petroleum at

Lucas, Texas, and

Port Arthur, Texas,

[fol. 71] Rate per barrel, forty-seven and one-half cents.

And from the points established by the Gulf Refining Company of Louisiana for the reception of crude petroleum into its trunk lines in what are known as the Vinton and Edgerly oil fields in Calcasieu Parish, Louisiana,

To said points established by the Gulf Pipe Line Company for the delivery of crude petroleum at

Lucas, Texas, and

Port Arthur, Texas,

Rate per barrel, twenty-cents.

In addition, all oil so transported from any of the above points will be subject to a further gathering charge of 12½¢ per barrel, except at Vinton and Edgerly where the gathering charge is 7½¢ per barrel.

Also, all deliveries to customers' vessels or to tank cars will be subject to a further charge of 2½¢ per barrel.

The rates in this tariff are subject to change at any time, as provided by law.

(*) Notice.—This is a newly installed station and service not included in cancelled tariff.

Issued October 1, 1924. Effective October 31, 1924.
F. A. Leovy, Vice-President Gulf Pipe Line Company, Frick Building Annex, Pittsburg, Pa.

[fol. 72] EXHIBIT CONWAY 4

Being Magnolia Pipe Line Company Texas Local Tariff No. A-5, Filed Jun. 27, 1929

Magnolia Pipe Line Company

Texas Local Tariff No. A-5

This tariff cancels and supersedes Magnolia Pipe Line Company Local Tariff No. A-4.

The rates published in this tariff are for the intra-state transportation of crude petroleum between the points in

the State of Texas named in the table below by carriers trunk pipe lines, being expressed in cents per barrel of 42 U. S. Gallons each, subject to the regulations prescribed by the Railroad Commission of Texas, which are printed below, and to change without notice, except as otherwise provided by law.

They apply from the points, established by this Company for the reception for transportation of crude petroleum into its pipe line in or near the oil fields or places, expressed in the horizontal columns TO the leading racks or other delivery places established by this Company at or near the points mentioned in the vertical columns opposite the points of origin in question; said table of rates being as follows, to-wit:

From / To	Burkburnett	Fort Worth	Sardis	Corsicana	De Leon	Luling	Beaumont	Magnetco	Atreco	Smiths Bluff
Electra	5	15	20	20	..	..	32.5	..	..	..
Burkburnett	..	15	20	20	..	..	32.5	..	..	..
Stephens Station	..	..	..	20	5	..	32.5	..	..	..
Olden	..	..	..	20	5	..	32.5	..	..	..
De Leon	..	..	..	20	..	..	32.5	..	..	..
Fort Worth	..	..	..	5	..	..	22.5	..	..	..
Corsicana	..	..	..	..	..	..	20	..	..	..
Groesbeck	..	..	..	..	..	..	20	..	..	..
Luling	..	..	..	..	..	..	20	..	..	..
Faulkner	..	..	..	..	..	..	20	..	..	..
Mirando	..	..	..	..	..	20	40	..	..	..
Crane	..	..	..	27.5	..	..	40	40	40	..
Midland	..	..	..	27.5	..	..	40	40	40	..
Iatan	..	..	..	27.5	..	..	40	40	40	..
Halley	..	..	..	27.5	..	..	40	40	40	40

In addition a gathering charge of ten cents (10¢) per barrel will be made against all crude oil so transported, except in the Webb-Duval-Zapata-Jim Hogg Counties (Texas) fields in which a gathering charge of twenty cents (20¢) per barrel will be made.

[fol. 73] No extra charge will be made for deliveries at destination point on carriers trunk pipe line.

The points referred to as Olden and DeLeon in the above Tariff are the points on carrier's trunk pipe line established in the Ranger-Desdemona and Stephens County Districts oil fields for the reception of oil into carriers lines. Halley,

Texas, is the receiving station for Winkler-Ward Counties oil fields; Luling, Texas, is the receiving station for Luling District oil fields; Faulkner, Texas is the receiving station of Panola County, Texas, oil fields; Mirando is the receiving station for the Webb-Duval-Zapata-Jim Hogg Counties (Texas) oil fields. Crane and Midland are receiving stations in the Crane-Upton Counties fields and Iatan is the receiving station for the Howard and Mitchell Counties oil fields.

Issued April 18, 1929. Effective April 18, 1929.

Issued by

B. H. Stephens, Vice-President and General Manager, Magnolia Pipe Line Company, Dallas, Texas.

[fol. 74] EXHIBIT MARKED "CONWAY 5-III(b)

Being Gulf Refining Co. of Louisiana Pipe Line Tariff No. 4, Filed Jun. 27, 1929

Gulf Refining Co. of Louisiana

Pipe Line Tariff No. 4

Superseding Gulf Refining Co. of Louisiana Pipe Line Tariff No. 3

This Tariff is for the intrastate transportation of crude petroleum by pipe line under the regulations hereto annexed:

1. From the established receiving station of said Company in the oil field near Jennings, Louisiana,

To the delivery station loading rock of the Company in or near the City of Jennings, as destination point, for loading there into cars to be provided by the shipper.

The charge for this transportation is 12½ cents per barrel, including such loading.

2. From the established receiving station of said Company in the oil fields near Edgerly, Louisiana,

To its delivery station loading rack in or near the town of Edgerly as destination point, for loading there into cars to be provided by the shipper.

The charge for this transportation is 12½ cents per barrel, including such loading.

3. From the established receiving stations of said Company in the oil fields known as Caddo and Pine Island, near Mooringsport, Louisiana,

To its delivery station loading rack in or near the tow- of Mooringsport, as destination point, for loading there into cars to be provided by the shipper.

The rate for this transportation is 12½ cents per barrel, including such loading.

The rates named in the transportation above include the gathering of oil from the settling tanks with which the pipe line gathering system of the Company is now or may be connected.

This tariff is subject to any changes at any time which the Company may lawfully make. The above and foregoing tariff and transportation thereunder is subject to the annexed rules and regulations of the Company.

[fol. 75] This tariff takes the place of, and supersedes, the tariff of this Company filed with the Railroad Commission of Louisiana, known as Pipe Line Tariff No. 3.

Gulf Refining Co. of Louisiana, by —— ——, Vice-President, Shreveport, Louisiana.

In force this first day of April, 1924.

[fol. 76] EXHIBIT MARKED "CONWAY 6 III (c)"

Being Shreveport-El Dorado Pipe Line Co., Inc., Pipe Line Tariff, Filed Jun. 27, 1929

I. C. C. No. 4, Cancelling I. C. C. No. 1

No supplement to this tariff will be issued except for the purpose of cancelling the tariff.

Shreveport-El Dorado Pipe Line Company, Inc.

Pipe Line Tariff

The rates published in this tariff are for the transportation of crude petroleum through the pipe lines of the Shreveport-El Dorado Pipe Line Co. Inc., and are subject to the regulations printed on page 2 hereof, and apply from points

in the States of Arkansas and Louisiana now established for the reception of crude petroleum into the lines of the Shreveport-El Dorado Pipe Line Co. Inc., to or in the vicinity of El Dorado, Arkansas and Shreveport, Louisiana.

From	To	Rate per bbl. of 42 U. S. gallons
Smackover Station, Ark.....	El Dorado, Arkansas.....	10¢ R
Smackover Station, Ark.....	Shreveport, Louisiana.....	20¢ R
Cornie Station, Ark.....	Shreveport, Louisiana.....	20¢ R
Crow Station, La. Homer Crude	Shreveport, Louisiana.....	15¢ R

R—Rates from Smackover Station, Cornie Station and Crow Station to Shreveport, La., reduced 7½ cents per barrel. Rate from Smackover Station to El Dorado reduced 2½ cents per barrel.

In addition, all oil tendered for shipment accessible to the gathering lines of this company will be subject to a gathering charge of five (5) cents per barrel.

Issued June 1, 1926. Effective July 10, 1926.

Issued by

B. H. Gray, Secretary Shreveport-El Dorado Pipe Line Co., Inc., Shreveport, La.

[fol. 77] EXHIBIT "CONWAY 7"

Being the Texas Pipe Line Company Pipe Line Tariff—Filed Jun. 27, 1929

I. C. C. No. 22, Canceling I. C. C. No. 12

The Texas Pipe Line Company

Pipe Line Tariff

From	To Port Arthur
Bull Bayou	(I) 25
Caddo	(I) 25
Crichton	(I) 25
DeSoto	(I) 25
Haynesville	(R) 30
Shreveport	(I) 25
Vinton	(I) 15

The rates published in this tariff are for the interstate transportation of crude petroleum through the pipe lines of

The Texas Pipe Line Company, are subject to the regulations printed on page 2 hereof, are expressed in cents per barrel of 42 United States gallons and apply from points in the State of Louisiana now established for the reception of crude petroleum into the pipe lines of The Texas Pipe Line Company, in the oil pools named as points of origin to the loading racks or other established delivery places of The Texas Pipe Line Company at or near point in the State of Texas named as destination.

On all deliveries at destination to consignee's vessels or tank cars connected with pipe lines of The Texas Pipe Line Company a further charge of 2½ cents per barrel.

*Additional for gathering at point of origin 12½ cents per barrel, except at Vinton where the rate therefor is 7½ cents per barrel.

The rates to Beaumont and Nederland, Texas, published in Tariff I. C. C. No. 12, are hereby canceled and no rates will hereafter be in effect to said points.

Issued July 1, 1926. Effective August 1, 1926.

J. L. Dowling, Vice-President the Texas Pipe Line Company, Houston, Texas.

(I) Increase.

(R) Reduction.

[fol. 78] EXHIBIT MARKED "CONWAY 8 III (d)"

Being Standard Pipe Line Company, Inc., Louisiana Local Tariff No. 5—Filed Jun. 27, 1929

L. P. S. C. No. 5, Cancelling L. P. S. C. No. 4

No supplement to this tariff will be issued except for the purpose of cancelling the tariff.

Standard Pipe Line Company, Inc.

Louisiana Local Tariff No. 5

(Issued under L. P. S. C. Authority No. 2547-PL)

The rates named in this tariff are for the intrastate transportation by pipe line of Crude Petroleum Oil subject to the regulations named herein.

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*Gathering charges based on zone system, published in Tariff I. C. C. No. 12, are hereby canceled and gathering charges as herein shown will hereafter be in effect.

From	To	Rate per barrel of 42 U. S. gallons
Haynesville Station, La.....	Anchorage, La.....	30¢
Weller Station, La.....	Anchorage, La.....	30¢
Caddo Station, La.....	Anchorage, La.....	20¢
Lewis Station, La.....	Anchorage, La.....	20¢
Moore Station, La.....	Anchorage, La.....	20¢
De Sota Station, La.....	Anchorage, La.....	20¢
Flora Station, La.....	Anchorage, La.....	20¢
Bellevue Station, La.....	Princeton, La.....	5¢

In addition, all crude petroleum oil tendered for shipment in Louisiana accessible to the gathering lines of this company will be subject to a gathering charge of twelve and one-half (12½¢) cents per barrel.

A charge of two and one-half (2½¢) cents per barrel will be made for loading into railroad tank cars.

Shipments transported under this tariff are entitled to such privileges and subject to such charges as are or shall be published by this company and as are lawfully in effect on date of shipment and lawfully on file with the Louisiana Public Service Commission as to intrastate traffic, providing for reconsignment, storage, transit privileges, or any other privileges, charges or rules which in any way increase or decrease the amounts to be paid on any shipment transported under this tariff, or which increase or decrease the value of the service to the shipper.

Issued May 8, 1928. Effective June 8, 1928.

Issued by H. T. Austermell, Secretary Standard Pipe Line Co., Inc., Baton Rouge, La.

(Respondent's Exhibits "Conway 9 and 10," side folios 79, 80, and 81)

* Denotes change.

RESPONDENTS EXHIBIT marked "CONWAY - 9" being page 141 from THE OIL AND GAS JOURNAL of date June 13, 1929, filed JUN 27 1929.



REFINERY AND CRUDE PRICES

Quotations on refined products are for interstate or export movement unless otherwise noted.



CALIFORNIA—												
130 vis., 2¼-3 color	.10½	.10½	.10½	.10½	.10½	.10½						
200 vis., 2½-3 color	.11½	.11½	.11½	.11½	.11½	.11½						
300 vis., 3-3¼ color	.13	.13½	.13	.13½	.13	.13½						
350 vis., 3½-4 color	.13½	.13½	.13½	.13½	.13½	.13½						
400 vis., 3½-4 color	.15	.15½	.15	.15½	.15	.15½						
Red Neutral:												
200 vis., 4½-5 color	.11	.11½	.11	.11½	.11	.11½						
300 vis., 5-6 color	.12	.12¼	.12	.12¼	.12	.12¼						
400 vis., 5-6 color	.13½	.14	.13½	.14	.13½	.14						
500 vis., 4½-5 color	.14¼	.15½	.14¼	.15½	.15¼	.15½						
500 vis., 5-6½ color	.15	.15½	.15	.15½	.15	.15½						
900 vis., 6½ plus color	.16	.16½	.16	.16¼	.16	.16¼						

Note—Bright stocks are not manufactured commercially on the Pacific Coast.

NEW YORK (BAYONNE) REFINERY PRICES

	June 11		June 4		May 28	
Gasoline, U. S. Motor, 58-60,437	.10		.10		.10	
Kerosene, water white, 41-43	.08		.08		.08	
*Fuel Oil, Bunker "C," 14-16, per bbl.	1.05		1.05		1.05	
†Fuel Oil, Diesel 28-30, per bbl.	2.00		2.00		2.00	
Gas Oil, 32-36 gravity	.05	.05½	.05	.05½	.05	.05½
25 pale Paraffin Oil	.10½		.10½		.10½	
28 pale Paraffin Oil	.07½		.07½		.07½	
28S red Paraffin Oil	.11½		.11½		.11½	
25O red Paraffin Oil	.11		.11		.11	
22S red Paraffin Oil	.09½		.09½		.09½	
20O red Paraffin Oil	.09		.09		.09	
Refined Wax:						
120-122 a.m.p., per lb.	.03½		.03½		.03½	
125-127 a.m.p., per lb	.04½		.04½		.04½	
130-132 a.m.p., per lb.	.04½		.04½		.04½	
133-135 a.m.p., per lb.	.06½		.06½		.06½	

CRUDE OIL GRAVITY TABLE

Gravity—	Okla., Kans., N. C. Tex.	No. La. and Arkansas	Crane, Upton, Crockett, Winkler, Howard, Pecos, Texas crudes, and Lea, N. Mex.	Stephens, Ark.	Wheeler (Texas Panhandle)	Gray County (Texas Panhandle)	Carson and Hutchinson (Texas Panhandle)	Salt Creek, Wyo.	Grade B & Light Crude (S. Coast)	Somerset (South Central Texas)
	1	2	3	4	5	6	7	8	9	10
24 and above	....	....	....	....	....	....	....	....	....	....
Below 24	....	....	....	....	....	....	....	....	....	....
Below 25	.85	....	.70	....	....	....	....	....	....	....
25 to 25.9	.90	....	.74	....	....	....	....	....	1.16	....
26 to 26.9	.94	....	.78	....	....	....	....	....	1.18	....
27 to 27.9	1.00	....	.82	....	....	....	....	....	1.21	....
Below 28	....	1.00	....	.90	.90	.90	.90	....	1.24	....
28 to 28.9	1.06	1.06	.86	.94	.90	.90	.90	....	....	....
29 to 29.9	1.10	1.10	.90	.98	.90	.95	.90	....	1.27	....
30 to 30.9	1.14	1.14	.94	1.02	.95	.98	1.10	....	1.30	....
31 to 31.9	1.20	1.20	.98	1.06	.98	1.00	.90	1.16	1.33	....
32 to 32.9	1.26	1.26	1.02	1.08	1.00	1.05	.90	1.20	1.36	....
33 to 33.9	1.30	1.30	1.06	1.10	1.06	1.10	.95	1.26	1.39	1.06
34 to 34.9	1.35	1.35	1.08	....	1.10	1.15	1.00	1.30	1.42	1.07
35 to 35.9	1.40	1.40	1.10	....	1.15	1.20	1.05	1.35	1.45	1.09
36 to 36.9	1.45	1.45	1.14	....	1.20	1.25	1.10	1.40	1.48	1.11
37 to 37.9	1.50	1.50	....	....	1.25	1.30	1.15	1.45	....	1.13
38 to 38.9	1.55	1.55	....	....	1.30	1.35	1.20	1.50	....	1.15
39 to 39.9	1.60	1.60	....	....	1.35	1.40	1.25	....	....	1.17
40 to 40.9	1.65	1.65	....	....	1.40	1.45	1.30	....	....	....
41 to 41.9	1.70	1.70	....	....	1.45	1.50	1.35	....	....	....
42 to 42.9	1.75	1.75	....	....	1.50	1.55	1.40	....	....	....
43 to 43.9	1.80	1.80	....	....	1.55	1.60	1.45	....	....	....
44 and above	1.85	1.85	....	....	1.60	1.65	1.50	....	....	....

CALIFORNIA—						
150 vis., 2½-3 color	.10½	.10½	.10½	.10½	.10½	.10½
200 vis., 2½-3 color	.11½	.11¾	.11½	.11¾	.11½	.11¾
300 vis., 3-3½ color	.13	.13½	.13	.13½	.13	.13½
350 vis., 3½-4 color	.13½	.13¾	.13½	.13¾	.13½	.13¾
400 vis., 3½-4 color	.15	.15½	.15	.15½	.15	.15½
Red Neutral:						
200 vis., 4½-5 color	.11	.11¼	.11	.11¼	.11	.11¼
300 vis., 5-6 color	.12	.12¼	.12	.12¼	.12	.12¼
400 vis., 5-6 color	.13½	.14	.13½	.14	.13½	.14
500 vis., 4½-5 color	.14¼	.15½	.14¼	.15½	.15¼	.15½
500 vis., 5-6½ color	.15	.15½	.15	.15½	.15	.15½
600 vis., 6½ plus color	.16	.16½	.16	.16¾	.16	.16¾

Note—Bright stocks are not manufactured commercially on the Pacific Coast.

NEW YORK (BAYONNE) REFINERY PRICES

	June 11		June 4		May 28	
Gasoline, U. S. Motor, 58-60,437	.10		.10		.10	
Kerosene, water white, 41-43	.08		.08		.08	
*Fuel Oil, Bunker "C," 14-16, per bbl.	1.05		1.05		1.05	
†Fuel Oil, Diesel 28-30, per bbl.	2.00		2.00		2.00	
Gas Oil, 32-36 gravity	.05	.05½	.05	.05½	.05	.05½
25 pale Paraffin Oil	.10½		.10½		.10½	
28 pale Paraffin Oil	.07½		.07½		.07½	
285 red Paraffin Oil	.11½		.11½		.11½	
250 red Paraffin Oil	.11		.11		.11	
225 red Paraffin Oil	.09½		.09½		.09½	
200 red Paraffin Oil	.09		.09		.09	
Refined Wax:						
120-122 a.m.p., per lb.	.03½		.03½		.03½	
125-127 a.m.p., per lb	.04½		.04½		.04½	
130-132 a.m.p., per lb.	.04½		.04½		.04½	
133-135 a.m.p., per lb.	.06½		.06½		.06½	
135-137 a.m.p., per lb.	.06½		.06½		.06½	
Petrolatum in barrels, carload lots, per pound:						
Dark green	.02		.02		.02	
Amber	.03½		.03½		.03½	
Extra amber	.03¾		.03¾		.03¾	
Cream	.06½		.06½		.06½	
Lily white	.07½		.07½		.07½	
Snow white	.08½		.06½		.08½	

*Lighterage 5.0 cents a barrel extra. †Lighterage 6.5 cents a barrel extra.

NEW YORK (BAYONNE) EXPORT PRICES

	June 11		June 4		May 28	
Kerosene, prime white	.08		.08		.08	
Kerosene, water white	.09		.09		.09	
600, steam refined cylinder stocks, in bbls.	.42	.43	.43	.44	.43	.44
635, steam refined	.44	.45	.45	.46	.45	.46
650, steam refined	.49	.50	.50	.51	.50	.51
900, Pennsylvania Flash	.52	.53	.53	.54	.53	.54
630, Pennsylvania Flash	.57	.58	.58	.59	.58	.59
600, Warren E	.44	.45	.45	.46	.45	.46
600, Oil City E	.44	.45	.44	.45	.44	.45
Light 140-150 Bright Stocks	.61	.66	.63	.68	.63	.68
Dark 140-150 Bright Stocks	.60	.64	.61	.66	.61	.66

LOS ANGELES EXPORT PRICES

	June 11		June 4		May 28	
Kerosene, water white	.05½	.06	.05½	.06	.05½	.06
U. S. Motor Gasoline, 53-55, 437 e.p.	.07	.07½	.07	.07½	.07	.07½

CRUDE OIL PRICES

OKLAHOMA, KANSAS, NORTH AND EAST CENTRAL TEXAS

Corsicana heavy (January 11)* ..... .80
Other fields ..... See gravity table

*Posted by Magnolia Petroleum Co.

TEXAS PANHANDLE

Gray County, Wheeler County and Carson-Hutchinson Counties—See gravity table.

WEST TEXAS

Iatan* ..... Same as North Texas
Crane-Upton-Crockett, Pecos, Winkler, Mitchell, and Glasscock (See gravity table).
Chalk† ..... .66

*Includes Howard County and Westbrook Fields.
†Posted by Humble Oil & Refining Co.

ARKANSAS-NORTH LOUISIANA

Smackover, below 24 gravity (May 20, 1929) ..... $ .65
Smackover, 24 gravity and above (May 20, 1929) 1.00
Cotton Valley (Below 36 gravity May 22) ..... .65
Bellevue (May 20, 1929) 1.10
Urania (May 21, 1929) 1.10
East El Dorado (May 22, 1929) ..... .65
Other fields ..... See gravity table

Cotton Valley crude above 36 gravity takes same gravity price schedule as shown for North Louisiana and Arkansas crude in Mid-Continent gravity price table.

Note—Smackover, Cotton Valley and Bellevue posted by Standard Oil Co. of Louisiana, and Magnolia Petroleum Co.; Urania posted by Louisiana Oil Refining Corp.; East El Dorado, Magnolia Petroleum Co.

GULF COAST

Grade A (May 20)* $1.30
Grade B ..... See gravity table
Jennings, La. (March 14)† $1.05
Saratoga, Batson, Dayton (March 14, 1927)‡ 1.30
Markham (March 14)‡ 1.00
High Island (December 14)‡ 1.00

*Humble Oil & Refining Co., The Texas Company, Gulf Pipe Line Co., and Sun Pipe Line Co. †Gulf Pipe Line Co. ‡Sun Pipe Line Co. §The Texas Company.
¶Posted by Gulf Pipe Line Co.

ROCKY MOUNTAIN STATES
Ohio Oil Co.-Midwest Refining Co.
(Effective May 21, 1929)

Rock Creek, Wyo.	$1.40
Salt Creek	See gravity table
Big Muddy	1.42
Grass Creek, heavy (July 27, 1928)	.90
Grass Creek, light	1.65
Mule Creek	1.30
Elk Basin	1.65
Lance Creek	1.65
Poison Spider (March 14, 1927)	1.00
Notches (March 14, 1927)	.65
Rex Lake (February 22)	1.10
Osage	1.65
Lost Soldier (contract, May 22)	1.05
Hamilton Dome (March 14, 1927)	.85
Greybull	1.65
Cat Creek (Montana) (July 27, 1928)	1.45
Sunburst (Montana) (May 23, 1929)	1.75
Torchlight	1.65
Hogback (New Mexico) (July 27, 1928)	1.70

Note—Salt Creek, Osage, Cat Creek, Greybull and Hogback posted by Midwest Refining Co., and the remainder by the Ohio Oil Co. Both companies post Grass Creek light and Elk Basin.

SOUTH CENTRAL AND SOUTH-WESTERN TEXAS

Luling (May 2)*	$ .90
Mirando (May 20, 1929)†	.90
Salt Flat (May 20, 1929)‡	1.25
Rockdale-Minerva (April 15):	
Below 28 gravity	1.25
28-38.9 gravity	1.27
39-39.9 gravity	1.29
40 and above	1.31
Thrall‡	...

(Continued on Page 142)

CRUDE OIL GRAVITY TABLE

Gravity—	Okla., Kans. N. C. Tex.	No. La. and Arkansas	Crane, Upton, Crockett, Winkler, Howard, Pecos, Texas crudes, and Lea, N. Mex.	Hogboom, Ark.	Wheeler (Texas Panhandle)	Gray County (Texas Panhandle)	Carson and Hutchinson (Texas Panhandle)	Salt Creek, Wyo.	Grade B & Light Crude (S. Coast)	Somerset (South Central Texas)
	1	2	3	4	5	6	7	8	9	10
24 and above	....	....	....	....	....	....	....	....	....	....
Below 24	....	....	....	....	....	....	....	....	....	....
Below 25	.85	....	.70	....	....	....	....	....	1.16	....
25 to 25.9	.90	....	.74	....	....	....	....	....	1.16	....
26 to 26.9	.94	....	.78	....	....	....	....	....	1.21	....
27 to 27.9	1.00	....	.82	....	....	....	....	....	1.24	....
Below 28	....	1.00	....	.90	.90	.90	.90	....	....	....
28 to 28.9	1.05	1.05	.86	.94	.90	.90	.90	....	1.27	....
29 to 29.9	1.10	1.10	.90	.98	.90	.95	.90	1.10	1.30	....
30 to 30.9	1.15	1.15	.94	1.02	.95	1.00	.90	1.15	1.33	....
31 to 31.9	1.20	1.20	.98	1.06	1.00	1.05	.90	1.20	1.36	....
32 to 32.9	1.25	1.25	1.02	1.10	1.05	1.10	.95	1.25	1.39	1.05
33 to 33.9	1.30	1.30	1.06	....	1.10	1.15	1.00	1.30	1.43	1.07
34 to 34.9	1.35	1.35	1.10	....	1.15	1.20	1.05	1.35	1.45	1.09
35 to 35.9	1.40	1.40	1.14	....	1.20	1.25	1.10	1.40	1.48	1.11
36 to 36.9	1.45	1.45	1.18	....	1.25	1.30	1.15	1.45	....	1.13
37 to 37.9	1.50	1.50	....	....	1.30	1.35	1.20	1.50	....	1.15
38 to 38.9	1.55	1.55	....	....	1.35	1.40	1.25	....	....	1.17
39 to 39.9	1.60	1.60	....	....	1.40	1.45	1.30	....	....	....
40 to 40.9	1.65	1.65	....	....	1.45	1.50	1.35	....	....	....
41 to 41.9	1.70	1.70	....	....	1.50	1.55	1.40	....	....	....
42 to 42.9	1.75	1.75	....	....	1.55	1.60	1.45	....	....	....
43 to 43.9	1.80	1.80	....	....	1.60	1.65	1.50	....	....	....
44 and above	1.85	1.85	....	....	1.65	1.70	1.55	....	....	....

Column 1, Note—Magnolia Petroleum Co. posted schedule May 20, 1929, making price below 36 gravity 70 cents per barrel, 36-36.9 gravity 75 cents, 37-37.9 gravity 85 cents, 38-38.9 gravity 90 cents, 39-39.9 gravity 95 cents, 40-40.9 gravity $1.05, and $1.51.9 gravity $1.15, with balance of the price schedule as shown above.

Oklahoma—Carter Oil Co., Prairie Oil & Gas Co., Sinclair Oil & Gas Co., Gypsy Oil Co., The Texas Company, May 20.

North Central Texas—Including Ranger, Mexia, Powell, Richland Wortham, Lytton Springs, Currie, Nocona and Moran, Prairie Oil & Gas Co., Sinclair Oil Refining Co., Humble Oil & Refining Co., The Texas Company and Gulf Refining Co., May 20.

Kansas—Prairie, Sinclair, The Texas Company and Carter, May 20.

Column 2—Arkansas and North Louisiana—(Caddo, Bull Bayou, Crichton, Cotton Valley, above 36 gravity, DeSoto, Haynesville, Homer and El Dorado only), May 26, Standard Oil Co. of Louisiana, Louisiana Oil Refining Corp., Gulf Refining Co., Magnolia Petroleum Co., schedule applies to Pine Island, Haynesville, Bull Bayou, Louisiana and Dorado, Ark., light crude.

Column 3—Humble Oil & Refining Co. and Magnolia Petroleum Co., May 20.

Column 4—Atlantic Oil Producing Co., Louisiana Oil & Refining Corp., May 21, 1929.

Columns 5, 6 and 7—Humble Oil & Refining Co., Magnolia Petroleum Co., May 20, 1929.

Column 8—Midwest Refining Co., May 20, 1929. All crude over 37 gravity $1.80 per barrel.

Column 9—Humble Oil & Refining Co., May 20, 1929 (schedule ends 35 and above).

Column 10—Grayburg Pipe Line Co. and Pioneer Oil & Refining Co., April 7.

CALIFORNIA CRUDE OIL PRICES

Standard Oil Co.-Union Oil Co. (Effective January 18, 1929)

Gravity—	Salt Lake, Potrero, Newport, Long Beach, Summerland, Lawndale Richfield, Torrance, Olinda-Brea, Alamitos Heights, Signal Hill, Seal Beach, Huntington Beach, Athens, Inglewood, Rosecrans-Dominguez, Watsonville	Whittier, La Habra, Coyote Hills	Midway-Sunset, Elk Hills, Lost Hills, Delridge, Buena Vista Hills	Montebello	Santa Fe Springs	Santa Maria, Casmalia	Wheeler Ridge, Fruitvale	Orcutt, Ventura, Rincon	Ventura Ave.	Elwood Terrace
	1	2	3	4	5	6	7	8	9	10
14 to 14.9	.70	.70	.50	.70	....	.50	.50	.65	.70	....
15 to 15.9	.70	.70	.50	.70	....	.50	.50	.65	.70	....
16 to 16.9	.70	.70	.50	.70	....	.50	.50	.65	.70	....
17 to 17.9	.70	.70	.50	.70	....	.50	.50	.65	.70	....
18 to 18.9	.75	.75	.56	.70	....	.56	.56	.70	.75	....
19 to 19.9	.80	.80	.62	.75	....	.62	.62	.70	.80	....
20 to 20.9	.85	.85	.68	.80	....	.68	.68	.70	.85	....
21 to 21.9	.89	.89	.74	.85	.85	.74	.74	.80	.89	....
22 to 22.9	.93	.91	.80	.90	.92	.80	.80	.87	.97	....
23 to 23.9	.97	.94	.85	.95	.98	.85	.85	.90	.98	....
24 to 24.9	1.01	.97	.90	.98	.98	.88	.88	.94	.94	....
25 to 25.9	1.05	1.00	.95	1.01	1.01	.91	.91	.98	.98	....
26 to 26.9	1.09	1.04	1.00	1.04	1.04	.94	.94	1.02	1.02	....
27 to 27.9	1.13	1.08	1.05	1.07	1.07	.98	.97	....	1.06	....
28 to 28.9	1.17	1.12	1.10	1.10	1.10	1.02	....	....	1.12	....
29 to 29.9	1.21	1.16	1.15	1.13	1.15	1.06	....	....	1.14	....
30 to 30.9	1.25	1.20	1.22	1.16	1.20	1.10	....	....	1.18	....
31 to 31.9	1.30	....	1.28	....	1.26	1.14	....	....	1.22	....
32 to 32.9	1.35	....	1.34	....	1.30	1.18	....	....	1.28	....
33 to 33.9	1.41	....	1.40	....	1.35	1.22	....	....	1.34	....
34 to 34.9	1.47	....	1.46	....	1.40	1.26	....	....	1.40	1.16
35 to 35.9	1.53	....	....	....	1.45	1.30	....	....	1.46	1.22
36 to 36.9	1.59	....	....	....	1.50	....	....	....	1.52	1.28
37 to 37.9	1.65	....	....	....	1.55	....	....	....	1.58	1.34
38 to 38.9	1.71	....	....	....	1.60	....	....	....	1.64	1.40
39 to 39.9	1.77	....	....	....	1.65	....	....	....	1.70	1.46
40 to 40.9	1.83	....	....	....	....	....	....	....	1.76	1.52
41 to 41.9	1.89	....	....	....	....	....	....	....	1.82	1.58
42 to 42.9	1.95	....	....	....	....	....	....	....	1.88	1.64

Kern River, Newhall-McKittrick, Mount Poso and Round Mountain .1 to 13.9 gravity 45 cents, 14 gravity and above 50 cents, effective October 2, 1929. On December 1, 1928, the Union Oil Co. posted Midway-Sunset, Elk Hills, Buena Vista, Lost Hills and Coalinga crude as follows: 11 to 13.9 gravity at 45 cents, 14 gravity and above at 50 cents.

Column 1—Signal Hill, Seal Beach, Huntington Beach and Alamitos Heights crude, 14 to 32.9 gravity, inclusive; Richfield, Olinda-Brea and Fullerton, 14 to 29.9 gravity; Torrance and Inglewood, 14 to 28.9 gravity, Domingues and Athens-Rosecrans, 24 to 42.9 gravity.

Column 2—Whittier crude, 14 to 22.9 gravity; Coyote Hills, 14 to 30.9 gravity.

Column 3—Kern River, Newhall and McKittrick, 11 to 13.9 gravity; Midway-Sunset, Buena Vista and Elk Hills, 11 to 13.9 gravity; Lost Hills, 11 to 24.9 gravity; oil below 14 gravity posted at 45 cents.

Column 6—Oil below 14 gravity posted at 45 cents.

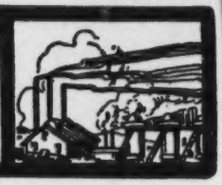
Columns 8 and 9 posted by Union Oil Co. only.

RESPONDENTS EXHIBIT makred "CONWAY - 10" being pages 138 and 139
from OIL AND GAS JOURNAL OF DATE MARCH 17, 1927. filed JUN 27, 1929.



REFINERY AND CRUDE PRICES

Quotations on Principal Refined Products and Crude Petroleum Markets in All the American Oil Fields



GASOLINE AND NAPHTHA

	Mar. 15		Mar. 8		Mar. 1	
OKLAHOMA (Group 3)—						
50-52 450 end point (Naphtha)	.06¾		.07¼	.07½	.07¾	.08
56-58 450 end point	.06½	.06¾	.07		.07¾	.08
58-60 450 end point	.06½	.06¾	.07	.07¼	.07½	
58-60 450 end point	.06½	.06¾	.07	.07¼	.07½	
58-60 437 end point (U. S. Motor)	.06¾	.07	.07¼	.07½	.07½	.08
60-62 400 end point	.07¼	.07¾	.08	.08¼	.08¼	.08½
64-66 375 end point	.08¼	.08½	.08¾	.09	.09	.09¼
68-70 360 end point	.08¾	.09	.09½	.09¾	.09⅞	.10⅛
64-66 437 end point (blend)	.06½	.07	.07¼	.07½	.07½	.08
KANSAS—						
58-60 437 end point (U. S. Motor)	.07	.07¼	.07½	.07¾	.08	
NORTH TEXAS—						
48-50 450 end point (Naphtha)	.06½	.06¾	.07	.07¼	.07½	.07⅝
56-58 450 end point	.06¾	.07	.07	.07¼	.07½	.07⅝
58-60 437 end point (U. S. Motor)	.06¾	.07	.07⅛	.07⅝	.07⅝	.07¾
60-62 400 end point	.07½	.07¾	.08	.08¼	.08¼	.08½
64-66 390 end point	.08	.08¼	.08½	.08⅝	.08¾	.09
64-66 375 end point	.08¼	.08½	.08⅝	.09	.09	.09¼
68-70 360 end point	.08¾	.09	.09½		.10	.10¼
64-66 437 end point (blend)	.06½	.06⅜	.07¼	.07½	.07½	.07⅝
NORTH LOUISIANA—						
58-60 437 end point (U. S. Motor)	.07	.07¼	.07½	.07¾	.08	.08¼
ARKANSAS—						
58-60 437 end point (U. S. Motor)	.07	.07¼	.07½	.07¾	.08	.08¼
PENNSYLVANIA—						
52-54 Naphtha	.10¼	.10½	.11	.11¼	.11½	.11¾
54-56 Naphtha	.10½	.10⅝	.11	.11½	.11½	.11¾
58-60 Gasoline	.10½	.10¾	.11¼	.11½	.11½	.11¾
60 Gasoline	.11¼	.11½	.12¼	.12½	.12½	.12¾
62 Gasoline	.11½	.11¾	.12⅜	.13	.13	.13¼
64 Gasoline	.12	.12¼	.13	.13¼	.13¼	.13½
66 Gasoline	.17	.17¼	.17	.17¼	.16½	.17
68-70 Gasoline	.17¼	.17½	.17¼	.17½	.17½	.18
CALIFORNIA—						
58-60 437 end point (U. S. Motor) domestic	.10	.10½	.10½	.11	.10½	.11
CHICAGO DISTRICT (Based on Group 3)—						
50-52 450 end point (Naphtha)	.07	.07¼	.07½		.08	
56-58 450 end point	.06¾		.07	.07½	.07¾	
58-60 437 end point (U. S. Motor)	.06¾	.07	.07¼	.07½	.07½	.08
60-62 400 end point	.07¾	.08	.08	.08¼	.08¼	.08½
64-66 375 end point	.08¼	.08½	.08¾	.09	.09⅛	.09½
68-70 360 end point	.08¾	.09	.09½	.09¾	.10	.10½
64-66 437 end point (blend)	.06½	.07	.07¼	.07½	.07¾	.08

NATURAL GASOLINE

	Mar. 15		Mar. 8		Mar. 1	
OKLAHOMA (Group 3)—						
Grade AA, 80-87.9, 375 e.p., rec. 90%	.04¾		.05¼	.05½	.06	.06¼
Grade A, 72-79, 375 e.p., rec. 90%	.05¼	.05½	.06¼		.06½	.06⅝
Grade BB, 84-92, 375 e.p., rec. 85%	.04		.04¾	.05	.05¼	
Grade B, 76-83.9, 375 e.p., rec 85%	.04½		.05		.05¾	
Grade C, 80-90, 375 e.p., rec. 78%	.03¾	.04	.04¼		.04¾	.05
NORTH TEXAS—						
Grade AA, 80-87.9, 375 e.p., rec. 90%	.04¾		.05¼	.05½	.06¼	
Grade A, 72-79.9, 375 e.p., rec. 90%	.05¼	.05½	.06¼		.06½	.06¾
Grade BB, 84-92, 375 e.p., rec. 85%	.04	.04¼	.04¾	.05	.05¼	.05⅝
Grade B, 76-83.9, 375 e.p., rec. 85%	.04½		.05	.05¼	.05¾	.06
Grade C, 80-90, 375 e.p., rec. 78%	.04		.04¼	.04½	.05	.05⅛
NORTH LOUISIANA—						
Grade A, 72-79.9, 375 e.p., rec. 90%	.06	.06½	.06½	.06¾	.07	.07¼
Grade B, 76-83.9, 375 e.p., rec. 85%	.05½	.05¾	.05¾	.06	.06⅜	.06⅝
Grade C, 80-90, 375 e.p., rec. 78%	.05	.05¼	.05½	.05¾	.06	.06¼
CALIFORNIA—						
75-86, 375-390 end point	.11½	.13	.12½	.13½	.12½	.13½
CHICAGO DISTRICT (Based on Group 3)—						
Grade AA, 80-87.9, 375 e.p., rec. 90%	.04¾	.05	.05½	.05⅝	.06¼	.06½
Grade A, 72-79.9, 375 e.p., rec. 90%	.05¼	.05½	.06¼	.06½	.06½	.06¾
Grade BB, 84-92, 375 e.p., rec. 85%	.04¼	.04½	.05	.05¼	.05¼	.05½
Grade B, 76-83.9, 375 e.p., rec. 85%		.04½	.05¼	.05½	.05¾	.06
Grade C, 80-90, 375 e.p., rec. 78%		.04	.04½	.05	.05	

BURNING OIL

	Mar. 15		Mar. 8		Mar. 1	
KANSAS—						
41-43 water white Kerosene	.06	.06¼	.06⅜	.06⅝	.06¼	.06⅝
OKLAHOMA (Group 3)—						
41-43 water white Kerosene	.05¼	.05½	.05¾		.05¾	.06
42-44 water white Kerosene	.05¾	.06	.06¼	.06½	.06⅜	.06½
NORTH LOUISIANA—						
41-43 prime white Kerosene	.05¾		.06	.06⅛	.06¼	
NORTH TEXAS—						
41-43 water white Kerosene	.05	.05¼	.05½	.05¾	.05¾	.06
ARKANSAS—						
41-43 water white Kerosene	.05¾		.06	.06¼	.06¼	.06½
PENNSYLVANIA—						
43 Kerosene prime white	.06¾	.07	.07	.07¼	.07⅜	.07½
45 Kerosene water white	.07	.07¼	.07¼	.07½	.07½	.07¾
46 Kerosene water white	.07¾	.08	.08	.08¼	.08¼	.08½
47 Kerosene water white	.08¼	.08½	.08½	.08⅝	.08¾	.09
300 Mineral Seal	.08½	.08⅝	.08½	.08¾	.08½	.08¾
CALIFORNIA—						
38-40 water white (high burning test)	.07	.07½	.07	.07½	.07	.07½
Engine distillate, 43-45, 445 end point	.07¼	.07¾	.07¾	.08	.07¾	.08
Engine distillate, 42-44, 480 end point	.07	.07½	.07¼	.07½	.07¼	.07½
CHICAGO DISTRICT (Based on Group 3)—						
41-43 water white Kerosene	.05½		.06	.06⅛	.06	.06¼
42-44 water white Kerosene	.06	.06¼	.06½		.06½	

FUEL OILS

	Mar. 15		Mar. 8		Mar. 1	
KANSAS—						
24-26 Fuel Oil	1.40	1.45	1.45	1.50	1.45	1.50
32-36 Gas Oil	.04	.04¼	.04¼	.04½	.04¼	.04½
38-40 Distillate	.04¾	.05		.05¼	.05	.05¼
*OKLAHOMA (Group 3)—						
Fuel Oil (sellers' cars)	1.12½			.20	1.15	1.20
Oil (sellers' cars)	1.1[illegible]			.25	1.22½	1.25
Oil (sellers' cars)	1.2			.30	1.25	1.30
26-30 Fuel oil (sellers' cars)	1.27½	1.30	1.30	1.35	1.30	1.35
28-30 Fuel Oil (sellers' cars)	1.40	1.45	1.45	1.50	1.45	1.50
32-36 Gas Oil (dark)		.03¾	.04	.04¼	.04½	.04¼
32-36 Gas Oil (straw overhead)	.03¾	.04	.04¼	.04⅜	.04¼	.04½
36-38 Distillate	.04	.04¼	.04¼	.04½	.04½	
38-40 Straw Distillate	.04¼	.04⅜	.04⅜	.04½	.04½	.04⅝
NORTH TEXAS—						
24-26 Fuel Oil (sellers' cars)	1.50	1.55	1.55		1.55	1.57½
32-36 Gas Oil (straw)	.03¾	.04	.03⅞	.04	.04⅛	.04⅜
38-40 Straw Distillate	.04¼		.04¼	.04⅜	.04½	
NORTH LOUISIANA—						
18-20 Fuel Oil	1.25		1.25	1.30	1.30	1.35
32-36 Gas Oil	.03¾	.04	.04¼	.04½	.04¼	.04½
ARKANSAS—						
36-38 Distillate	.04¼	.04⅜	.04⅜	.04½	.04½	.04⅝
32-36 Gas Oil (straw)	.04¼	.04¼	.04¼	.04¼	.04¼	.04½
16-20 Refinery Fuel Oil	1.20	1.22½	1.22½	1.25	1.25	1.30
GULF COAST (South Texas)—						
Gas Oil	.05⅛	.05¼	.05½	.05⅝	.05½	.05⅝
Fuel Oil	1.60	1.65	1.75		1.75	1.85
PENNSYLVANIA—						
30-34 Fuel Oil	.05¾	.06	.05⅞	.06	.06	.06¼
36-40 Fuel Oil	.06¼	.06¾	.06¼	.06⅜	.06¼	.06½
CALIFORNIA—						
36-36 Distillate	.04	.04¾	.04	.04¾	.04	.04¾
27-32 Distillate	.03½	.04	.03½	.04	.03½	.04
*15-20 Fuel Oil, Bunkers (at tide water)	.92½	1.04	.92½	1.04	.92½	1.04
15-20 Fuel Oil (cargo lots)	.79	.87½	.82½	.87½	.82½	.87½
27 plus Diesel	1.15	1.19	1.15	1.19	1.15	1.19
CHICAGO DISTRICT (Based on Group 3)—						
24-26 Fuel Oil (sellers' cars) Group 3	1.25		1.25	1.30	1.25	1.30
22-26 Fuel Oil (sellers' cars) Group 3	1.20	1.22½	1.20	1.25	1.20	1.25
18-22 (Group 3)	1.17½	1.20	1.20		1.20	
16-20 (Smackover)	1.25		1.25	1.30	1.25	1.30
32-36 Gas Oil (zero)	.04	.04½	.04¼	.04⅝	.04¼	.04⅝
32-36 Gas Oil (industrial)	.03¾	.04	.04	.04¼	.04⅛	.04⅜
36-38 Distillate	.04	.04¼	.04¼	.04½	.04½	.04⅝
38-40 Straw Distillate	.04¼	.04½	.04½	.04¾	.04¾	.04⅞

*Bunkers.

LUBRICATING OIL AND WAX

	Mar. 15		Mar. 8		Mar. 1	
OKLAHOMA (Group 3)—						
100 vis., 2 color, 20-25 cold test	.06¾	.07	.06¾	.07	.06	.06¼
100 vis., 3 color, 20-25 cold test	.06½	.07	.06½	.07	.06	.06½
150 vis., 3 color, 20-25 cold test	.08½	.09	.09½	.10	.08¼	.08½
150 vis., 4 color, 20-25 cold test	.08¼	.08¾	.09½	.09¾	.08	.08½
180 vis., 3 color, 23-28 cold test	.09½	.10	.10	.11	.09½	.10
180 vis., 4 color, 23-28 cold test	.09¾	.10	.10	.10½	.09½	.09¾
180 vis., 5 color, 23-28 cold test	.09½	.10	.09¾	.10¼	.09¼	.09½
200 vis., 3 color, 23-28 cold test	.10½	.11	.10¾	.11¾	.10¾	.11
200 vis., 4 color, 23-28 cold test	.10¼	.10¾	.11	.11½	.10½	.10¾
200 vis., 5 color, 23-28 cold test	.10½	.11	.10½	.11¼	.10¼	.10½
240 vis., 3 color, 25-30 cold test	.13½	.14	.14	.15	.13¾	.14
240 vis., 4 color, 25-30 cold test	.13½	.14	.14	.14½	.13½	.13¾
240 vis., 5 color, 25-30 cold test	.12½	.13	.13	.14	.12¾	.13
280 vis., 3 color, 25-30 cold test	.16½	.17	.16	.17	.15¾	.16
280 vis., 4 color, 25-30 cold test	.15¼	.15½	.15½	.16½	.15	.15½
280 vis., 5 color, 25-30 cold test	.14½	.15	.15	.16	.14¼	.14½
Cylinder Stocks:						
600, steam refined, light green	.07½	.10	.08½	.11	.08½	.11
600, steam refined, dark green	.05	.06	.06	.07	.06	.07
190-200 vis. @ 210 Bright Stock	.31	.33	.31	.35	.31	.35
150-160 vis. @ 210 Bright Stock	.26		.27		.27	.31
Waxes:						
124-126 White Crude Scale Wax	.04	.04⅛	.04	.04¼	.04¼	
PENNSYLVANIA—						
34 Neutral	.07¼	.07½	.07½	.07¾	.07½	.07¾
34 Sundebloom Neutral	.08½	.08¾	.08½	.08¾	.08½	.08¾
36 Miners' Neutral	.07¼	.07½	.07¼	.07½	.07¼	.07½
150, 3 color	.28¼	.28½	.28¼	.28½	.28¼	.28½
180, 3 color	.29¼	.30	.29¾	.30	.29¾	.30
200, 3 color	.32½	.32¾	.32½	.32¾	.32½	.32¾
220, 3 color	.34¼	.34½	.34¼	.34½	.34¼	.34½
600, steam refined	.11¼	.11½	.11¼	.11½	.11½	.11¾
635, steam refined	.14¼	.14½	.14¼	.14½	.14¼	.14½
650, steam refined	.15½	.15¾	.15½	.15¾	.15½	.15¾
600, Pennsylvania flash	.19½	.20	.19½	.20	.19½	.20
630, Pennsylvania flash	.29½	.30	.29¾	.30	.30¼	.30½
*550, E filtered	.18¼	.18½	.18¼	.18½	.18½	.19
*600, E filtered	.20	.20¼	.20	.20¼	.20	.20½
600, E filtered	.18¾	.18½	.18	.18½	.18	.18½
600, D filtered	.25¼	.25¾	.25½	.25¾	.25½	.26
550, E filtered	.17½	.18	.17½	.18	.17½	.18
550, D filtered	.21½	.22	.21½	.22	.21½	.22
Pennsylvania Bright Stock	.36	.36½	.37		.37	
122-124 White Crude Scale Wax	.04¼	.04⅜	.04¼	.04⅜	.04½	.04⅜
†124-126 White Crude Scale Wax	.04⅜	.04½	.04⅜	.04½	.04½	.04⅝

*At Warren, Pa. †At New York City.

GULF COAST (South Texas)—						
No. 2 color, 100 vis., pale oil	.08	.08½	.08	.09	.08	.09
No. 3 color, 200 vis., pale oil	.11	.11½	.11	.12	.11	.12
No. 3 color, 300 vis., pale oil	.12	.12½	.12	.13	.12	.13
No. 3½ color, 500 vis., pale oil	.14	.14½	.14	.15	.14	.15
No. 4 color, 750 vis., pale oil	.16	.16½	.16	.17	.16	.17
No. 5 to 6 color, 200 vis., red oil	.09	.09½	.09	.10	.09	.10
No. 5 to 6 color, 300 vis., red oil	.10½	.11	.11	.12	.11	.12
No. 5 to 6 color, 500 vis., red oil	.12	.12½	.12	.13	.12	.13
No. 5 to 6 color, 750 vis., red oil	.15	.15½	.15	.16	.15	.16
CALIFORNIA—						
130 vis., 2½-3 color	.10½	.11	.10	.10½	.10	.10½
200 vis., 2½-3 color	.11	.11½	.10½	.11	.10½	.11
300 vis., 3 -3½ color	.11½	.12	.11	.11½	.11	.11½



REFINERY AND CRUDE PRICES

Quotations on Principal Refined Products and Crude Petroleum Markets in All the American Oil Fields



350 vis., 3½-4 color	.12	.13	.11	.11½	.11	.11½
400 vis., 3½-4 color	.13	.13½	.12½	.13	.12½	.13
Red Neutral:						
200 vis., 4½-5 color	.09½	.10½	.09	.09½	09	.09½
300 vis., 5 -6 color	.10½	.11½	.09½	.10	.09½	.10
400 vis., 5 -6 color	.12	.13½	.11½	.12	.11½	.12
500 vis., 4½-5 color	.13½	.14½	.12	.13½	.12	.13½
500 vis., 5 -6½ color	.12½	.13½	.12	.12½	.12	.12½
600 vis., 6½ plus color	.13½	.14½	.12½	.13	.12½	.13

Note: Bright stocks are not manufactured commercially on the Pacific Coast.

NEW YORK (BAYONNE) REFINERY PRICES

	Mar. 15	Mar. 8	Mar. 1
Gasoline, U. S. Motor, 58-60 437	.11	.12	.13
Kerosene, water white, 41-43	.08	.08	.09
*Fuel Oil, bunker "C," 14-16, per bbl.	1.75	1.75	1.75
*Fuel Oil, Diesel, 28-30, per bbl.	2.50	2.40	2.40
Gas Oil, 28 plus	.06¼	.06¼	.06¼
25 pale Paraffin Oil	.13	.13	.13
28 pale Paraffin Oil	.08	.08	.08
285 red Paraffin Oil	.13½	.13½	.13½
250 red Paraffin Oil	.12½	.12½	.12½
225 red Paraffin Oil	.11	.11	.11
200 red Paraffin Oil	.10	.10	.10
Refined Wax:			
120-122 a.m.p., per lb.	.05½	.05½	.05½
125-127 a.m.p., per lb.	.05⅝	.05⅝	.05⅝
130-132 a.m.p., per lb.	.06	.06	.06
135-137 a.m.p., per lb.	.06⅜	.06⅜	.06⅜
Petrolatum, in bbls.; carload lots, per lb.:			
Dark green	.02	.02	.02
Amber	.03⅜	.03⅜	.03⅜
Extra amber	.03¾	.03¾	.03¾
Cream	.05½	.05½	.05½
Lily white	.07½	.07½	.07½
Snow white	.08½	.08½	.08½

*Lighterage 5.5c a barrel extra.

NEW YORK (BAYONNE) EXPORT PRICES

	Mar. 15	Mar. 8	Mar. 1
Gasoline, U. S. Motor, 58-60 437, in cases	.2565	.2565	.2665
Kerosene, standard white, in cases	.1765	.1815	.1865
Kerosene, water white, in cases	.1865	.1965	.2015
600 steam refined cylinder stock, in bbls.	.20	.20	.20
635 steam refined	.22	.22	.22
650 steam refined	.23½	.23½	.23½
600 Pennsylvania flash	.28	.28	.28
630 Pennsylvania flash	.35	.35	.35
600 Warren E	.27	.27	.27
600 Oil City E	.25	.25	.25
Light 135	.46	.46	.46
Dark 135	.44	.44	.44

LOS ANGELES EXPORT PRICES

	Mar. 15	Mar. 8	Mar. 1
Kerosene water white	.05¾ .06½	.05¼ .05¾	.05¼ .05¾
U. S. Motor Gasoline, 53-55 437 e.p.	.08½ .09	.08½ .09¼	.08½ .09¼

CRUDE OIL PRICES

OKLAHOMA, KANSAS, NORTH AND EAST CENTRAL TEXAS

*Corsicana heavy (March 14, 1927).....$1.00
Other fields .....See gravity table

*Posted by Magnolia Petroleum Co.

TEXAS PANHANDLE

*Carson County .....$ .95
*Hutchinson County 95
Gray-Wheeler Counties..See gravity table

*Humble Oil & Refining Co., Magnolia Petroleum Co., Gulf Pipe Line Co. and Kay County Gas Co., March 14.

WEST TEXAS

*Iatan (Same as North Texas)
Crane-Upton-Crockett .....See gravity table

*Includes Howard County and Westbrook Fields. Kay County Gas Co. pays $1.16 for Howard County crude, effective March 12.

ARKANSAS-NORTH LOUISIANA

Cotton Valley (Feb. 24, 1927).....$1.10
Bellevue (Feb. 24, 1927)..... 1.00
Urania (August 26, 1926) 1.10
Calion (May 18, 1926) 1.10
Other fields .....See gravity table

Note—Cotton Valley and Bellevue, Standard Oil Co. of Louisiana, Gulf Refining Co. and Magnolia Petroleum Co.; Urania, Louisiana Oil Refining Corp.; Calion (East El Dorado), Gulf Refining Co.

GULF COAST

(Goose Creek, Hull, Liberty, West Columbia, Orange, Boling, Sour Lake, Humble, High Island, Pierce Junction and Spindletop.)

‡Grade A (March 14) $1.20
Grade B .....See gravity table
*Jennings, La. (October 29, 1926)..... 1.15
†Saratoga, Batson, Dayton (March 8, 1927) 1.20
**Magnham 1.15

*Gulf Pipe Line Co. †Sun Pipe Line Co. ‡Humble Oil & Refining Co. and other major buyers. **The Texas Company.

SOUTH CENTRAL AND SOUTHWESTERN TEXAS

*Luling (March 14) $1.05
†Mirando (March 14) 1.00
Rockdale-Minerva (Milam County)... 1.35
*Thrall .....
Callihan (May 15) 1.75
Lytton Springs (Lockhart) See gravity table
Somerset .....See gravity table

*Posted by Magnolia Petroleum Co. Thrall prices same as north central Texas less 19¼ cents per cwt. freight.
†Magnolia Petroleum Co., Humble Oil & Refining Co.

ROCKY MOUNTAIN STATES
Ohio Oil Co.-Midwest Refining Co.
(Effective March 14)

Rock Creek, Wyo. $1.25
Salt Creek .....See gravity table
Big Muddy 1.25
Mule Creek (February 23) 1.30
Grass Creek light 1.33
Grass Creek, heavy ..... .68
Elk Basin 1.33
Lance Creek 1.33
Poison Spider 1.00
Notches ..... .65
Rex Lake (February 23) 1.10
Osage 1.33
Lost Soldier (contract) (May 17)..... 1.60
Greybull-Torchlight 1.33
Hamilton Dome 1.35
Cat Creek (Mont.) 1.33
Sunburst (Mont.) (October 5) 1.35
Artesia (March 12) 1.00
Hogback (N. Mex.) 1.75

Note: Salt Creek, Osage, Cat Creek, Greybull and Hogback posted by Midwest Refining Co., and the remainder by the Ohio Oil Co. Both companies post Grass Creek light and Elk Basin.

EASTERN STATES
Joseph Seep Purchasing Agency
(Effective March 7)

Penna Grade Oil in New York Transit Line (New York).....$2.15
Bradford District Oil in National Transit Lines (Pennsylvania) 2.15
Penna Grade Oil in National Transit Lines (Pennsylvania)..... 2.05
Penna Grade Oil in Southwest Pennsylvania Lines (West Virginia) 2.05
Penna Grade Oil in Eureka Pipe Line lines (Pennsylvania) 2.00

(Continued on Page 140)

CRUDE OIL GRAVITY PRICE TABLE

Gravity—	Okla., Kans., N. C. Tex., La.-Ark. 1	Smackover, Ark. 2	Stephens, Ark. 3	Wheeler and Gray Counties (Texas Panhandle) 4	Crane, Upton Crockett Counties (West Texas) 5	Salt Creek, Wyo. 6	Grade B & Light Crude (G. Coast) 7	Somerset (South Central Texas) 8
Below 24	....	1.10	....	....	....	....	....	....
24 to 24.9	....	1.25	....	....	....	....	....	....
Below 25	....	....	....	....	....	....	1.15	....
25 to 25.9	....	1.25	....	....	....	....	1.17	....
Below 26	....	....	....	....	....	....	....	....
26 to 26.9	....	1.25	....	....	.70	....	....	....
27 to 27.9	....	1.25	....	....	.72	....	1.19	....
Below 28	****	....	1.00	....	.74	....	1.21	....
28 to 28.9	1.12	....	1.02	.80	.76	....	1.23	1.32
29 to 29.9	1.14	....	1.04	.82	.78	1.14	1.25	1.36
30 to 30.9	1.16	....	1.06	.84	.80	1.16	1.27	1.39
31 to 31.9	1.18	....	1.08	.86	.82	1.18	1.29	1.32
32 to 32.9	1.20	....	1.10	.88	.84	1.20	1.31	1.35
33 to 33.9	1.22	....	....	.90	.86	1.22	1.33	1.38
34 to 34.9	1.24	....	....	.92	.88	1.24	1.35	1.41
35 to 35.9	1.26	....	....	.94	.90	1.26	1.37	1.44
36 to 36.9	1.28	....	....	.96	.92	1.28	....	1.47
37 to 37.9	1.30	....	....	.98	....	1.30	....	1.50
38 to 38.9	1.32	....	1.00	....	....	....	....	1.53
39 to 39.9	1.34	....	1.02	....	....	....	....	....
40 to 40.9	1.36	....	1.04	....	....	....	....	....
41 to 41.9	1.38	....	1.06	....	....	....	....	....
42 to 42.9	1.40	....	1.08	....	....	....	....	....
43 to 43.9	1.42	....	1.10	....	....	....	....	....
44 to 44.9	1.44	....	1.12	....	....	....	....	....
45 to 45.9	1.46	....	....	....	....	....	....	....
46 to 46.9	1.48	....	....	....	....	....	....	....
47 to 47.9	1.50	....	....	....	....	....	....	....
48 to 48.9	1.52	....	....	....	....	....	....	....
49 to 49.9	1.54	....	....	....	....	....	....	....
50 to 50.9	1.56	....	....	....	....	....	....	....
51 to 51.9	1.58	....	....	....	....	....	....	....
52 and above	1.60	....	....	....	....	....	....	....

Column 1—Oklahoma: Prairie Oil & Gas Co., Sinclair Oil & Gas Co., Gypsy Oil Co., Magnolia Petroleum Co., March 12; Carter Oil Co., The Texas Company, March 14.

North Central Texas—(Including Ranger, Mexia, Powell, Richland, Wortham, Lytton Springs [Southwest Texas], Iatan and Panola [Magnolia only], Currie, Nocona, Moran and Corsicana light): Humble Oil & Refining Co., March 12; Magnolia, Texas, Prairie, Sinclair and Gulf, March 12; The Texas Company, March 14.

Kansas—Prairie, Sinclair, Magnolia, March 12; Carter, Texas, March 14.

Arkansas and North Louisiana—(Caddo, Bull Bayou, Crichton, DeSoto, Haynesville, Homer and El Dorado only): Standard Oil Co. of Louisiana, March 14; The Texas Company, March 14; Magnolia Petroleum Co., Pine Island, Haynesville and Bull Bayou, El Dorado, March 14; El Dorado, March 14; Gulf Production Co., March 14.

Column 2—Standard Oil Co. of Louisiana, The Texas Company, Gulf, Atlantic, February 24, and Magnolia, February 25.

Column 3—Atlantic Oil Producing Co., March 14.

Column 4—Humble Oil & Refining Co. and Gulf Pipe Line Co., March 14.

Column 5—Humble Oil & Refining Co., Kay County Gas Co. and Gulf Pipe Line Co., March 14.

Column 6—Midwest Refining Co., March 12, 1927. All crude over 37 gravity, $1.30 per bbl.

Column 7—Humble Oil & Refining Co. and other major buyers (schedule ends "35 and above"), March 14, 1927.

Column 8—Grayburg Pipe Line Co. and Pioneer Oil & Refining Co., March 7

****Prices for crude below 28 gravity: Oklahoma, Kansas and Texas, Magnolia Petroleum Co., $1.10, March 12, 1927; Arkansas, North Louisiana, March 14. Other companies, 2 cents less for each degree.

CALIFORNIA CRUDE PRICES
***Standard Oil Co.-Union Oil Co. (Effective March 11, 1926)**

Gravity—	Long Beach Huntington Beach Richfield Brea-Olinda Rosecrans-Dom'guez Torrance-Inglewood 1	Whittier La Habra Montebello 2	Kern River Newhall-McKittrick Midway-Sunset Elk Hills Lost Hills Belridge 3	Coyote 4	Santa Fe Springs 5	Coalinga 6	Wheeler Ridge 7	Santa Maria Ventura Salt Lake 8
14°	.85	.85	.75	.85	....	.75	.75	.85
15°	.87	.85	.75	.85	....	.75	.75	.85
16°	.90	.85	.75	.85	....	.75	.75	.85
17°	.94	.85	.75	.85	....	.75	.75	.85
18°	.98	.86	.75	.86	....	.75	.75	.85
19°	1.04	.87	.76	.87	....	.75	.75	.85
20°	1.10	.89	.82	.90	.85	.79	.78	.90
21°	1.16	.91	.90	.92	.91	.84	.81	.97
22°	1.22	.94	1.00	1.06	.94	.93	.85	1.04
23°	1.28	.97	1.11	1.14	.97	1.06	.89	1.11
24°	1.34	1.01	1.22	1.22	1.02	1.07	.93	1.18
25°	1.40	1.05	1.31	1.30	1.08	1.14	.97	1.25
26°	1.46	1.09	1.44	1.38	1.16	1.21	1.01	1.32
27°	1.52	1.13	1.55	1.46	1.24	1.28	1.05	1.39
28°	1.58	1.17	1.66	1.54	1.32	1.36	....	1.46
29°	1.64	1.21	1.77	1.62	1.40	1.42	....	1.53
30°	1.70	1.25	1.88	1.70	1.48	1.49	....	1.60
31°	1.76	....	1.99	....	1.60	1.56	....	1.67
32°	1.84	....	2.10	....	1.72	1.62	....	1.73
33°	1.92	....	2.21	....	1.84	1.70	....	1.79
34°	2.00	....	2.32	....	1.96	1.77	....	1.85
35°	2.08	....	....	....	2.08	1.84	....	1.92
36°	2.16	....	....	....	2.16	....	....	....
37°	2.24	....	....	....	2.24	....	....	....
38°	2.32	....	....	....	2.34	....	....	....
39°	2.44	....	....	....	2.44	....	....	....
40°	2.54	....	....	....	....	....	....	....
41°	2.64	....	....	....	....	....	....	....
42°	2.74	....	....	....	....	....	....	....

*Column 1—Long Beach and Huntington Beach crudes, 14 to 32 degrees, inclusive; Richfield and Brea-Olinda, 14 to 30 degrees; Torrance and Inglewood, 14 to 28 degrees; Domingues, 24 to 42 degrees. Rosecrans crude ranges from 14 to 42 degrees, but only Union Oil Co. posts below 24 degrees.
Column 2—Whittier and La Habra crudes, 14 to 22 degrees; Montebello, 14 to 30 degrees.
Column 4—Kern River, Newhall and McKittrick, 14 to 19 degrees; Midway-Sunset and Elk Hills, 14 to 32 degrees; Lost Hills and Belridge, 14 to 24 degrees.
Column 6—Santa Fe Springs. Only Union Oil Co. posts below 24 degrees.
Column 8—Salt Lake, 14 to 19 degrees, inclusive; Santa Maria, 14 to 30 degrees; Ventura, 14 to 26 degrees. Posted only by Union Oil Co.

[fol. 82] RESPONDENT'S EXHIBIT

Being Pages 12 and 13 from Information Circular, Department of Commerce, Bureau of Mines, Number 6114, Filed Jun. 27, 1929

Intf. Cir. 6114

State, county, field	Average gravity: Degrees A. P. I.	Average gravity: Specific gravity	Production (thousands of barrels): 1926	Production (thousands of barrels): 1927	Posted price per barrel, July 1: 1926	Posted price per barrel, July 1: 1927	Posted price per barrel, July 1: 1928	Per cent gasoline	Per cent sulphur	Type (base of crude)
Louisiana:										
Acadia:										
Jennings	24.3	0.908	342	269	$1.33	$1.15	$1.15	0.0	0.36	A
Bossier:										
Bellevue	19.0	.940	788	472	1.50	1.25	1.25	....	....	....
Elm Grove	29.5	.879	222	222	2.10	1.14	1.11	13.5	.27	M
Caddo:										
Caddo—light	40.1	.825	3,587	4,310	2.45	1.36	1.40	....	....	....
Caddo—heavy	26.5	.896	1,162	1,479	2.10	1.10	.91	....	....	....
Calcasieu:										
Edgerley	2.10	.928	207	467	1.60	1.20	1.20	.0	.68	A
Lockport	24.8	.905	1,343	2,038	....	....	....	....	....	....
Starks	21.0	.928	....	262	....	1.20	1.20	....	....	....
Sulphur	20.9	.929	....	(1/)	....	....	....	....	....	....
Vinton	18.6	.943	2,215	1,786	1.60	1.20	1.20	....	....	....
Cameron:										
Hackberry	21.0	.928	....	(1/)	....	1.15	1.15	....	....	....
Sweet Lake	29.5	.879	1/ 16	1/ 81	....	....	....	....	....	....
Claiborne:										
Haynesville	35.0	.850	3,328	2,600	2.10	1.26	1.25	....	....	....
Homer	3.2	.844	2,033	1,785	2.20	1.28	1.28	30.2	.63	M
De Soto:										
De Soto	36.0	.845	321	541	2.30	1.28	1.28	....	....	....

State, county, field	Average gravity: Degrees A. P. I.	Average gravity: Specific gravity	Production (thousands of barrels): 1926	Production (thousands of barrels): 1927	Posted price per barrel, July 1: 1926	Posted price per barrel, July 1: 1927	Posted price per barrel, July 1: 1928	Per cent gasoline	Per cent sulphur	Type (base of crude)
Iberia:										
Iberia	21.0	.928	....	(1/)	....	....	....	....	....	....
Jefferson Davis:										
Welsh	22.0	.922	(1/)	(1/)	....	....	....	....	....	....
[fol. 83] La Salle:										
Urania	21.0	0.928	3,669	3,321	1.15	1.00	0.75	....	....	....
Red River:										
Bull Bayou-Crichton	39.5	.828	1,037	1,070	2.25	1.34	1.37	....	....	....
St. Martin:										
Anse La Butte	24.0	.910	17	17	....	....	....	....	....	....
Webster:										
Cotton Valley	29.0	.882	2,914	1,968	1.20	1.00	....	.75	....	....
Haynesville (See Claiborne).										
State	29.9	.877	23,201	22,818	1/1.65	2/1.30	....	....	....	....

1/. In 1926 Sweet Lake includes Welsh. In 1927 Sweet Lake includes Hackberry, Iberia, Sulphur, and Welsh.
2/. Average value per barrel for year.

[fol. 84] IN UNITED STATES DISTRICT COURT

In Equity. No. 19129

OHIO OIL COMPANY

vs.

E. A. CONWAY, Supervisor of Public Accounts, Substituted as Defendant for W. N. McFarland, Former Supervisor of Public Accounts

Before Foster, Circuit Judge, and Dawkins and Borah, District Judges

OPINION—Filed Aug. 9, 1929

On Final Hearing

FOSTER, C. J.:

In this case plaintiff filed a bill seeking interlocutory and final injunctions to prevent the collection of certain taxes, levied under the provisions of Act No. 5 of 1928 of the Louisiana Legislature, on the ground that the taxes imposed by said act are unreasonable, discriminatory and would deprive it of the equal protection of the laws, in contravention of the 14th Amendment of the Constitution of the United States. And also on the ground that the Legislature exceeded its authority under the Constitution of Louisiana in adopting said act.

On a former hearing an interlocutory injunction was denied. Ohio Oil Company vs. McFarland, 28th Fed. (2nd) 441. On appeal from that decision the Supreme Court reached the conclusion that the questions of fact presented could not be satisfactorily determined from the affidavits presented and, as there was danger of irreparable injury to the plaintiff, an interlocutory injunction on terms should have been granted, pending a hearing on the merits. Ohio Oil Co. vs. Conway, 279 U. S.—, decided March 5, 1929. The material allegations of the pleadings and the provisions of the law complained of are set out in detail in the opinion above referred to and need not be repeated. Stated as briefly as possible, the case is this.

[fol. 85] Sec. 21 of Art. 10 of the Constitution of Louisiana of 1921 authorizes the levying of taxes on the natural resources of the state severed from the soil or water; provides that such natural resources may be classified for purposes of taxation; and that such taxes may be predicated upon either the quantity or value of the product, at the time and place where it is severed. Act No. 140 of 1922, adopted to carry into effect the above quoted article of the Constitution, imposed a tax of oil and gas of three percentum on the gross market value of the production thereof. By Act No. 5 of 1928, the Act of 1922 was amended with the intention of imposing severance taxes on natural resources by quantity rather than by value. This last act divides oil into six classes according to gravity and taxes it at different rates per barrel, beginning with oil of 28 gravity and below, taxed at four cents, and ending with oil above 43 gravity, taxed at eleven cents.

Plaintiff is engaged in producing crude oil solely in certain oil fields in North Louisiana, to wit: the Urania field in LaSalle parish, the Haynesville field in Claiborne parish, the Pine Island field in Carro parish, and the Cotton Valley field in Webster parish. The oil produced in the Urania field is below 28 in gravity; in the Haynesville field it runs from 30 to 35.9 gravity; in the Pine Island field from 30 to 39.9 gravity; and in the Cotton Valley field from 31 to 52 gravity. In the year 1927 in round numbers 18,000,000 barrels of oil were produced in North Louisiana and 5,000,000 in South Louisiana fields, a total of 23,000,000 barrels. Later statistics are not in evidence. Palintiff produces about 1,200,000 barrels per annum say about 6.7 per cent of the total in North Louisiana and about 5.2 per cent of the total in the state.

Crude oils vary greatly as to base, having a paraffine, asphalt or mixed base, and in chemical content and gravity. The term gravity as applied to oil does not mean specific gravity as the lighter the oil the higher the gravity. The higher gravity oils usually have a paraffine base and are more valuable for the extraction of gasoline and other burn-[fol. 86] ing oils while the lower gravity oils usually have an asphalt base and are more valuable for the making of lubricating oils and gas oil, a substance from which gasoline may be extracted by a process known as cracking. How-

ever, the value of the lower gravity oils for the making of lubricating oil depends a great deal upon the amount of sulphur contained, the more sulphur the less value. The gravity of oil is easily determined by the use of a hydrometer marked according to the Beaume or some similar scale. All oil is tested for gravity at the well when delivered to the pipe line companies and the gravity grade is shown on the run tickets.

It appears from the price lists printed in the accredited trade journals, which are taken from those posted by the various oil companies, and also from the report of the Louisiana Conservation Commission for the years 1926-1928, all filed in evidence, that in all oil fields throughout the country oil is listed according to gravity and usually the price is higher for higher gravities although oils of the same gravity in different fields vary somewhat in price.

In North Louisiana fields oil varies in gravity from below 28 to above 43. In the South Louisiana fields until recently oil varied in gravity from below 28 to about 30. Now a new well has been brought in at a depth of 5,000 to 6,000 feet and produces oil of about 40 gravity. However, in this field oils are graded for sale as "A" and "B". Oil of "A" grade is of 19 to 26 gravity, should contain not more than four-tenths of one per cent of sulphur and has definite specifications as to viscosity. It is very desirable for the making of lubricating oil. Grade "A" oil sells at a flat price regardless of gravity. All other oil in South Louisiana fields is classed as B grade and is listed for sale according to gravity. There is a difference in the cost of transporting oil from the wells to the refineries in favor of South Louisiana fields of about 22 cents per barrel.

[fol. 87] Taking the figures from the report of the Louisiana Conservation Commission above mentioned, which will serve as well as any for comparison, it appears that all oil has fluctuated considerably in market price over a period of five years, the tendency being generally downward and production in Louisiana has fallen off. The prices listed as of February 21, 1928, show oil of 38 plus gravity (taxed at 10 cents) at $1.34 and $1.55 per barrel; oil of above 32 to 36 gravity (taxed at 8 cents) at $1.13, $1.20 and $1.26 per barrel; oil of 20 to 22 gravity (taxed at 4 cents) at 75¢ per barrel and oil in the Bellview field in North Louisiana of

19 to 20 gravity (taxed at 4 cents) at $1.25 per barrel. Oil of A grade of South Louisiana of 26 gravity and below (taxed at 4 cents) at $1.20 per barrel.

Plaintiff's contention as to inequality is based on the above shown discrepancies in the amount of the tax imposed, measured by an ad valorem standard. That is to say, A grade oil is taxed only about 3.3 per cent of its value while oil of the same gravity produced by plaintiff is taxed at 5.3 per cent of its value and oil of higher gravities, which sells for the same price as A grade oil, is taxed at double the amount per barrel or about 6.6 per cent of its value.

Undoubtedly a state has the right to impose specific taxes as well as ad valorem taxes, unless prohibited by the state constitution. The constitution of Louisiana expressly authorizes the levying of specific taxes on oil severed from the soil. Specific taxes must bear some relation to value. Cooley on Taxation, 4th Ed., par. 297. If the legislature had taxed all oil at say 4¢ per barrel the producers of low valued oil would have had just cause to complain. Classification was therefore necessary. Analyzing the figures shown by the evidence it appears that oil above 28 gravity while taxed at different rates per barrel is taxed at about the same rate, say 6.6 per cent, ad valorem; and that all oil below 28 in gravity, leaving out of consideration peculiar [fol. 88] properties making it more desirable for the manufacture of lubricating oil, is taxed at about the same rate, say 5.3 per cent ad valorem. As to the A grade oil of South Louisiana, notwithstanding the advantage it enjoys from closer proximity to the refineries and lower rates of transportation, it is taxed the same as oil in the Bellview field in North Louisiana having similar desirability for making lubricating oil, say 3.3 per cent ad valorem.

In adopting Act 5 of 1928 providing for definite taxes by the barrel and defining different classes of oil, taxable at different rates per barrel, the legislature was acting well within the authority granted by the Louisiana Constitution.

The provisions of the 14th amendment requiring the equal protection of the laws as applied to state statutes have been repeatedly considered by the courts and the principles governing are well established. As to laws imposing taxes it is well settled that the states may classify prop-

erty and occupations for purposes of taxation. The legislature has a wide discretion in adopting the classification and it need not be scientifically exact provided it is reasonable, not arbitrary, not intentionally discriminatory, and rests upon some ground of difference having a fair and substantial relation to the object of the legislation, so that all persons similarly situated shall be treated alike. The tax need not operate equally throughout the state, provided it is equal as to all persons within a particular district. Louisville Gas Co. vs. Coleman, 277 U. S. 32; Sunday Lake Iron Co. vs. Wakefield, 247 U. S. 350; Toyota vs. Hawaii, 226 U. S. 184; Billings vs. Illinois, 188 U. S. 97: Bell's Gap R. R. Co. vs. Pa., 134 U. S. 232.

It is impossible to have exact equality of taxation even on an ad valorem basis. Difference of opinion between assessors alone would prevent. If the legislature had been so minded they could have provided the North and South Louisiana oil fields into taxing districts and imposed a different rate in each. Or they could have classified oil as that more valuable for making lubricating oil and that more [fol. 89] valuable for making gasoline and imposed different rates. In classifying oil the legislature was not bound to take into consideration all the different properties that oil from different fields might possess and act accordingly. Nor were they obliged to foresee fluctuations of market value which with oil, as with any other commodity, depends largely on supply and demand. It is certain that gravity is one means of identifying all oil, is universally used by the trade, and has a definite relation to value in oil of comparatively the same properties. That some inequality of taxation results does not render the classification made by Act 5 of 1928 so unreasonable as to infringe the 14th amendment. There is no basis for holding that the law is intentionally discriminatory and the tax bears equally on all persons producing the same quality of oil.

The injunction prayed for will be denied and the bill will be dismissed.

[fol. 90] IN UNITED STATES DISTRICT COURT

In Equity. No. 19129

OHIO OIL COMPANY

vs.

E. A. CONWAY, Supervisor of Public Accounts, Substituted as Defendant for W. N. McFarland, Former Supervisors of Public Accounts

FINAL DECREE—Filed Aug. 9, 1929

This cause came on for hearing at a former day, the evidence was taken in open Court and the case was argued by counsel, whereupon the court took time to consider. And now being advised, for the written reasons filed this day,

It is ordered, adjudged, and decreed that the injunction prayed for to prevent the collection of taxes imposed by Act No. 5 of the Louisiana Legislature for the year 1928 be denied and that the bill be dismissed. Plaintiff to pay all costs.

(Sgd.) Rufus E. Foster, United States Circuit Judge. (Sgd.) Ben C. Dawkins, United States District Judge. (Sgd.) Wayne G. Borah, United States District Judge.

August 9th, 1929.

[fol. 91] IN UNITED STATES DISTRICT COURT

PETITION FOR APPEAL TO SUPREME COURT OF THE UNITED STATES AND ORDER ALLOWING SAME AND CONTINUING PRELIMINARY INJUNCTION UPON APPELLANT FURNISHING BOND IN THE SUM OF $50,000.00—Filed Aug. 20, 1929

In the above styled and numbered cause, comes now The Ohio Oil Company, the complainant, and showing that there is manifest error to its prejudice in the decree dissolving the preliminary injunction and dismissing its suit, now moves and prays the Court for the reasons specifically set

out in the assignment of errors which it is herewith filing, that it be granted an appeal with supersedeas, to the Honorable the Supreme Court of the United States and complainant further moves and prays that the preliminary injunction heretofore entered herein be continued in full force and effect pending the aforesaid appeal.

(Signed) S. L. Herold, S. P. Cousin, R. L. Benoit, Solicitors for Complainant.

Order

The above petition for an appeal, and for continuance of the preliminary injunction heretofore issued herein pending said appeal, having been considered, and counsel for complainant and defendant having been heard, it is hereby ordered that the appeal be granted as prayed for, to offer it as a supersedeas, and that pending said appeal the preliminary injunction heretofore isued by this Court be continued in full force and effect upon complainants furnishing bond, conditioned as the law directs in the full sum of Fifty Thousand Dollars.

Thus done and signed at New Orleans, Louisiana this 20th day of August, 1929.

(Signed) Rufus E. Foster, Circuit Judge; Wayne G. Borah, Ben C. Dawkins, Judges.

[fol. 92] In United States District Court

Assignment of Errors—Filed Aug. 20, 1929

In the above entitled and numbered cause, comes now the plaintiff, The Ohio Oil Company, and respectfully shows that in the opinion and decree herein handed down on final hearing denying its application for a writ of injunction and dismissing its bill of complaint, there is manifest error to its prejudice; and, for specification of such error, plaintiff shows that this Honorable Court erred:

1

In holding that Act No. 5 of the Louisiana Legislature of 1928 is not violative of the provisions of Section 21 of

Article X of the Louisiana Constitution, requiring severance taxes to be predicated upon either quantity or value.

2

In holding that Act 5 of 1928 of the Louisiana Legislature is not void in denying to the complainant the equal protection of the laws, guaranteed by the Fourteenth Amendment to the Constitution of the United States.

3

In holding that the severance tax imposed by Act 5 of 1928 is levied according to quantity.

4

In holding that the classification by gravity attempted by said Act 5 of 1928 is not unreasonable and arbitrary.

5

In not holding that gravity is no indicium of relative value, utility or content with respect to the oils produced in Louisiana generally, and therefore is entirely an arbitrary method of classification.

6

In holding that a classification of oil for the purpose of the imposition of severance taxes at varying specific rates is permissible under Section 21 of Article X of the Constitution of Louisiana.

[fol. 93]

7

In not holding that the basis of classification attempted by said Act 5 of 1928, namely the gravity of the oil produced, necessarily results in an arbitrary, unreasonable and oppressive discrimination against this complainant.

8

In not holding that the classification of all oil produced in Louisiana according to gravity and the imposition of

different specific taxes upon each such attempted class is justified by no ground of difference bearing a reasonable and just relation to the equal protection of the laws guaranteed by the Fourteenth Amendment.

9

In not holding Act 5 of 1928, to be void as violative of the Fourteenth Amendment because of the proof that its system of imposition of severance taxes upon oil is of such character that substantial equality will not result from its operation.

10

In not holding the method of graduation of specific taxes upon crude oil of different gravities by Act 5 of 1928, to be so unreasonable as necessarily to result in arbitrary discrimination which particularly affects the plaintiff.

11

In not holding that the discriminations effected by Act 5 of 1928 were and are intentional.

12

In holding that the Legislature may, consistently with the equal-protection clause of the Fourteenth Amendment to the Constitution of the United States, impose severance taxes upon producers of oil in North Louisiana, (where plaintiff operates exclusively) substantially greater than upon those engaged in the identical business in South Louisiana.

13

In not holding the provisions of said Act 5 of 1928 imposing a severance tax on oil to be violative of the Fourteenth Amendment to the Constitution of the United States, in view of the proof that the plaintiff is thereby subjected to a burden of taxation excessive and unreasonable as compared with that levied upon other persons engaged in the same occupation, as the direct result of the varying of

[fol. 94] the tax according to arbitrary standards fixed in said act.

Wherefore plaintiff prays that said decree be reversed.

(Signed) S. L. Herold, S. P. Cousin, R. L. Benoit, Solicitors for Complainant.

[fol. 95 & 96] Supersedeas bond on appeal for $50,000, approved and filed August 20, 1929, omitted in printing.

[fol. 97] In United States District Court

In Equity. No. 19129.

The Ohio Oil Company

vs.

E. A. Conway, Supervisor of Public Accounts of the State of Louisiana

Narrative Statement of Evidence—Filed Oct. 10, 1929

Condensed and Narrative Statement of the Testimony

This cause came on for hearing in open court on June 25, 1929, before the District Court, composed of Honorable Rufus E. Foster, Circuit Judge, and Honorable Ben C. Dawkins and Honorable Wayne C. Borah, District Judges.

Whereupon, the trial was proceeded with and testimony of witnesses taken, which is now stated in condensed and narrative form, in accordance with the rules of practice in such cases provided, as follows, to wit:

R. A. Burdick, a witness for the plaintiff, testified:

That he is a Cashier of the complainant, The Ohio Oil Company, with which he has been connected for 27 years. The Ohio Oil Company first engaged in the business of producing oil in Louisiana in May, 1921, and is operating as such producer in the Haynesville, Cotton Valley and

Pine Island fields and until recently in the Urania field; Haynesville being in Clairborne Parish, Cotton Valley in Webster Parish, Pine Island in Caddo Parish, and Urania in La Salle Parish, and all these parishes being in Northwest Louisiana. The Ohio Oil Company maintains an office in Shreveport, where its records are kept. Prior to the passage of Act 5 of 1928, the complainant company had spent, in connection with its business of drilling for and producing oil in Northwest Louisiana, approximately seven or eight million dollars. In August, 1928, the production [fol. 98] of the plaintiff corporation in the Haynesville field was approximately 2800 barrels per day; in the Cotton Valley field, 1500 or 1600 barrels per day; in the Pine Island field, about 800 barrels per day; and in the Urania field about 1200 barrels daily. This was the average daily production of the plaintiff during that period. The average production for the eight months from August 1, 1928, to April 1, 1929, was 100,750 barrels per month, of the value of $116,336.00. The witness has prepared detailed statements showing the total numder of barrels produced each month during the aforesaid period from each of the fields in which the plaintiff operated, together with the market value of such oil. The statement also shows the amount of tax which the plaintiff would have paid on tha production under the law as it was in effect before 1928, and also the tax that would be exacted from the plaintiff under the provisions of Act 5 of 1928. The witness testified that these statements are correct; whereupon they were offered in evidence, filed, and marked "Plaintiff A-1" and "Plaintiff A-2," and appear elsewhere in this record.

The increased tax that would be exacted of the plaintiff under the new law, Act 5 of 1928, in excess of that imposed under the previous act, for the eight months from August 1, 1928, to April 1, 1929, would be $26,954.00, an increase of approximately 110 per cent.

The three per cent tax exigible under the old law would have been, for the eight months, $24,430.00 and that under Act 5 of 1928, $51,384.00, an increase of$26,954.00 for the eight-month period.

The two statements—Plaintiff A-1 and Plaintiff A-2—correctly state the gravity of the oil produced by th plain

tiff companq in each of the fields, and the quantity of oil of each particular gravity mentioned in the statement.

The business of The Ohio Oil Company in Louisiana is solely the production of oil and gas, which it sells at the mouth of the well to pie-line companies. The Ohio Oil [fol. 99] Company owns no refineries in Louisana, and it does not ship any out of the State, all of its production being sold in the State of Louisana. The prices shown on the statement are also correct and are the prices received by the plaintiff from the pipe-line companies.

Cross-examination:

The gravity of the oil is shown on the run tickets given to plaintiff company by the pipe-line company that runs the oil, and such gravity is determined by the use of a hydrometer. There is no difficulty in the determination of the gravity of crude oil; it is determinated with a dydrometer, and any one can use such instrument.

The Ohio Oil Company purchased no crude oil, except that in the Haynesvildle field it buys some of the royalty oil of the lessors under its leases. The business of The Ohio Oil Company is that of producing and selling oil, and not of refining it. Its purchases and sales in each field in which it operates are made on a gravity basis.

C. D. Keene, a witness for the plaintiff, testified:

He is a resident of Shreveport, Louisiana, where he has been living for 19 years, being engaged there in the business of producing and refining oil. The witness is a graduate of the Technical University of Delft, Holland, where he was graduated as a mining engineer. He was born in Holland. He was for a time in the employ of the government coal mines in Holland, and afterwards was engaged in geological work for oil companies in Rumania, whence he came to America. The witness has been extensity engaged in the oil business since he came to Shreveport, being interested in the drilling of wells in almost every oil pool in North Louisiana and South Arkansas. He is President of the Keen & Woolf Oil Company, which for a num-

ber of years operated a refinery in Houston. Witness is also interested in the Shreveport Producing & Refining Company, of which he has been President, which company [fol. 100] is engaged in the business of refining North Louisiana and South Arkansas crude oil. Witness has been closely associated with the business of producing, refining and selling oil in Louisiana for 19 years.

Gravity is the proportion between the weight of a given quantity of any material as compared to an equal volume of water at 60 degrees Fahrenheit. This is called specific gravity. The term "Gravity" as used in the oil business, however, is not specific gravity, but Beaume gravity, under which the lighter the substance the higher the Beaume gravity; so that a heavy oil is of a low Beaume gravity, and a light oil is of a higher Beaume gravity.

The only system of drilling that is used in the production of oil in Louisiana is what is known as the rotary system. This is true in both North and South Louisiana, there being no difference in the method or system used for obtaining oil in the different sections of the State.

Crude petroleum is a mixture of many hydrocarbons. Generally speaking, crude petroleums are divided into three classes, paraffine-base, asphalt-base and mixed-base crudes, the latter being a combination of paraffine- and asphalt-base crudes. All three of these classes are found in Louisiana. In North Louisiana there are found paraffine-base, mixed-base and asphalt-base crudes. In South Louisiana the oil produced is almost exclusively asphalt-base crude.

These different petroleums are identified as of a specific base by the product obtained from the residuum after distillation. If the residuum is paraffine, it is a paraffine-base crude; if the residuum is asphalt, it is an asphalt-base crude; and if the residuum is a combination of paraffine and asphalt, it is a mixed-base crude.

The process of refining oil is distillation. Paraffine-base oil in that manner yields gasoline, kerosene, gas oil, some lubricating oils, and wax. Asphalt-base crude usually [fol. 101] yields a very small amount of gasoline by distillation, the first product ordinarily being gas oil, then lubricating oil, and the residuum, which is asphalt. In the case of paraffine-base oil, gasoline comes off first. The gas oil, which is the first product obtained from asphalt-base

oils, may be subjected to the cracking process and gasoline thereby obtained. The asphalt-base crudes in the Gulf Coast district of Louisiana are very valuable for the production of lubricating oil, and the gas oils obtained by distillation are very desirable for the manufacture of gasoline by cracking. Some of the asphalt-base crudes of North Louisiana, such as those of the Urania, Bellevue and Hosston fields, are valuable for lubricating purposes, but Pine Island heavy oil does not have that value. All crude petroleums are compositions of various hydrocarbons. The fact that two oils are of the same specific gravity does not in any way indicate that they have the same contents, because the gravity is the sum of the total of the gravities of the various components entering into the crude. A crude petroleum of a definite Beaume gravity may contain a good deal of gasoline, some kerosene and, for the remainder, fuel oil; whereas another oil of the same gravity may contain a great deal less gasoline, much kerosene and very little fuel oil. Gravity is an index of relative value of oils only in the same pool or district. It has very little connection with the relative value of oils from different fields.

The crude oil, as it comes from the well, is run into tanks, from which the producer sells to the pipe lines, the well recognized market prices being the prices posted by the pipe-line companies buying the oil.

Asphalt-base crudes are produced, in North Louisiana, in Pine Island, Hosston, Bellevue and Urania. The oil produced in Urania, Bellevue and Hosston is all sold at flat prices. Gravity is a factor in price changes only in Caddo fields, De Soto-Red River fields, Homer, Haynesville and Cotton Valley, which fields produce similar paraffine-base [fol. 102] crudes from closely associated territories and from similar sands. The oils produced in South Louisiana are sold at flat prices, and not by gravity.

The Oil Weekly is a reliable trade journal. The witness, being handed a copy of the Oil Weekly of May 28, 1926, being the same issue that was filed in evidence by the defendant on the rule for preliminary injunction, stated that the journal showed that oil was sold on a flat-price basis in Bellevue, Jennings, Vinton, Edgerly, Stark's Dome, Urania and Calion, and at Cotton Valley below 36 gravity. Hosston oil is not quoted, but it is never sold on a gravity

basis, but, to the witness' knowledge, always at a flat price.

At this point plaintiff offered in evidence the Oil Weekly of May 25, 1928, which is made a part of defendant's answer in this cause, with particular reference to page 130, showing posted prices of Louisiana crude. Said document was filed in evidence and marked "Plaintiff B," and appears elsewhere in this record.

Oils of different gravities are produced in the same fields, and from the same tracks of land, and sometimes from the same sand. As wells grow older, the Beaume gravity tends to increase.

With respect to Gulf Coast crude suitable for the manufacture of lubricating oils, the heavier the oil—that is to say, the lower the Beaume gravity—the more desirable it is for such manufacture, because the heavier the oil the larger the proportion of lubricants that can be extracted.

Witness is familiar with Urania oil, having produced there, and having used such oil in his refineries. To his knowledge, it is practically the same as Gulf Coast "A" oil. Gulf Coast crudes, which are produced in South Louisiana, are divided into "A" and "B" grades, according to their utility for the production of lubricating oil, the "A" grade being that which is valuable for such purpose. The demarcation between the grades is determined by viscosity and sulphur content, but "A" grade oil must be less than 25 degrees Beaume gravity. Hosston, Bellevue and Urania oils, in North Louisiana, are used for the manu-[fol. 103] facture of lubricants, and are practically the same as Gulf Coast "A" crude.

Cross-examination:

As between similar oils, gravity is indicative of relative value, but not as between different kinds of oil.

"Q. Do you regard gravity as an arbitrary, or rather as a reasonable and significant method of selling and buying oils?

"A. No, sir; I do not.

"Q. You do not regard it as reasonable?

"A. As between similar oils. It is an indicator——

"Q. What I mean is this——

"A. As between different oils, it is not.

"Q. The gravity test is generally used for the selling and buying of oils on the market, that is, the oil dealer deals with the consumer, deals with the manufacturer, and deals with the pipe line men on a gravity basis. Now do you say that that is not a fairly reasonable method of dealing in oil for selling and buying purposes?

"A. As between oils of similar nature, I think it is a very wise scale to adopt.

"Q. Is that the reason you consider it not a reasonably fair method of buying and selling oil?

"A. I can only repeat my statement that it is fair; the gravity basis is fair between oils of similar nature.

"Q. Why do they use it for oils of all natures; why does the A. P. I. and trade adopt it and use it?

"A. Well, of course, it does not mean that the gravity scale as adopted is the only way to express the gravity. Any other gravity would be just as good. It is a handy and quick way and has some merit to find out how much money producers are entitled for their oil.

"Q. Then it is a fair, reasonable and just method of dealing in oil?

"A. In that particular case, yes. In addition I would say this, it is not uniform everywhere. In that same trade journal it gives prices quoted for oil in California which I think is better than the one in Louisiana. It is partly based on gravity and partly based on pool. It gives 12 different fields and you can find by going down the names of the fields, and opposite the gravity, and for what you can buy that particular crude.

[fol. 104] "Q. That does not maintain in Louisiana?

"A. No, but I say it is the proper way to buy crude on the gravity basis."

(Quoted part inserted at request of defendant.)

Bellevue oil is transported by pipe line and tank cars. Urania oil is handled by tank cars. Hosston oil is refined at Hosston. All of the oil in the Mid-Continent fields is bought on a gravity basis, although in West Texas crude oil was sold on other than a gravity basis until a few weeks before.

The gasoline contained in paraffine oils and obtained by distillation is an important element in its value. With re-

spect to Gulf Coast oils, although they contain little gasoline naturally, they can be rendered valuable for gasoline content by the breaking up of the molecules by the cracking process. In the case of Gulf Coast "A" grade crudes, lubricating oil is the largest determinative factor in the price; whereas, with the light paraffine-base crudes, the gasoline content is the principal factor. While Grade "A" oil of the Gulf Coast must not be over 25 gravity, gravity is really an unimportant factor, because any oil between 17 and 25 gravity Beaume may be an "A" grade oil, provided it meet the specifications as to viscosity and sulphur content.

"Q. In arriving at Grade "A" oil in South Louisiana, does gravity mean anything at all to you? Has it any relationship to that grade?

"A. Yes, sir; it has.

"Q. Explain what it is.

"A. I know this. I will put myself now in the position of a purchaser of Grade "A" oil. I know if I go to a purchaser and his oil is less than 25 gravity, I will tell him that he has Grade "A" oil and pay him for Grade "A" oil, but I would know deep down in my own heart if I did that man justice I would pay him more for the oil. I can afford to pay 20 or 25 cents more for 19 gravity than for 24. I make the same profit or lose the same money in refining it.

"Q. When you went out in the South Louisiana fields to buy crude, would you measure it and take the gravity just as you would anywhere else in Louisiana.

"A. If I went to purchase and didn't know what the quality of the oil was, I would take a sample of it, may be thirty or fifty gallons and ship it to my laboratory and the [fol. 105] first test I would tell the Chemist to make would be the gravity; and then it has to be analyzed. These different tests would have to be made before I pay that man for Grade-A oil.

"Q. Let us assume that you know exactly what Grade-A oil is, and you are in the Gulf Coast Section. Will you determine the gravity of that oil in the field before you take it?

"A. Yes.

"Q. Isn't that the only test you make in that field, if you know what it is already?

"A. No, sir; I would not say so.

"Q. Would you go back to your laboratory again before you would buy that oil?

"A. Yes, sir.

"Q. But you would ascertain the gravity—

"A. Yes, sir.

"Q. Immediately?

"A. Yes, sir."

(Quoted part inserted at request of defendant.)

Prior to about 12 years ago, there was no classification of Gulf Coast crudes, but, with the discovery of lighter oils not suitable for lubricating stock, it became necessary to make a distinction between the grades of petroleum found in the Coastal fields. "B" grade crudes are desirable because of ability to obtain gasoline by the cracking process from the gas oil, obtained by distillation of the crude.

A well was brought in in the Jennings field a few weeks before the trial, producing oil of a gravity of about 35 Beaume, and which was valuable for its gasoline content. So far as the witness can remember, Coastal "A" oil has always sold at a flat price.

Oil is produced in North Louisiana and South Louisiana by the same method; that is, by the same kind of labor, machinery and derricks—all by the rotary system. Oil is found at different depths in the various portions of the State, there being shallow wells in North Louisiana and South Louisiana, and deep wells in North Louisiana and South Louisiana.

It is a fact that crude oil today in the Mid-Continent [fol. 106] field is sold on a gravity basis, by reason of the fact that the higher the gravity the higher the gasoline content. Under the modern method of manufacturing and refining crude oil, the heavier elements of Gulf Coast Crude "A" grade could be broken up by the cracking process and become valuable for its gasoline content; but the Gulf Coast Crude "A" is peculiarly adapted for lubricating oil. The gasoline developed by the cracking process from Grade

"B" crude is higher than that from cracking paraffine crudes.

(This paragraph inserted on request of defendant.)

Redirect examination:

With reference to the statement on cross examination that prices in the Mid-Continent field were regulated by gravity, he was referring to Oklahoma and Kansas, where the oils are paraffine—and mixed-base crudes. There is no relationship between gravity and value except as between similar oils. Such relationship depends upon the content of the oil.

E. OLIVARI, a witness for the plaintiff, testified as follows: He is an oil accountant of the Gulf Companies, at Houston, and is familiar with the prices and the gravity of oils produced in the various fields of Louisiana. In North Louisiana, 62.75 per cent of the oil is purchased on the gravity basis. This covers Caddo, Haynesville, Homer and the De Soto-Red River fields, where oil is purchased on a gravity basis, and Elm Grove, Bellevue, Urania and Cotton Valley, where purchasers are made at flat prices, as they also are of the heavy oils from the Pine Island field in Caddo. The total production of the fields in North Louisiana on June 1, 1929, was 21,900 barrels per day sold on a gravity basis, and 13,000 barrels per day sold at flat prices, unaffected by gravity; making a total of 34,900 barrels per day produced in North Louisiana.

[fol. 107] At the same date, the total production of oil in the Coastal fields—that is to say, in South Louisiana—was 18,741 barrels, of which 53.74 per cent, or 10,071 barrels, was Grade "A", and 46.26 per cent, or 8,635 barrels, was Grade "B". Grade "A" oil was on that date selling for $1.30 a barrel. The Gulf Refining Company buys Grade "B" oil at flat prices; that is to say, the Gulf Refining Company paid $1.30 for all Coastal oil. Some of the other companies, however, are buying Coastal "B" oil on a gravity basis. The range of gravity on that date in the South Louisiana fields was from 19.3 to 30.4. Only 725 barrels of a gravity of more than 28 Beaume was being produced in South Louisiana on June 1, 1929, although

since that date a well was brought in in the Jennings field producing oil of a higher gravity.

Cross-examination:

The oil from the Elm Grove, Bellevue and Urania fields, in North Louisiana, and that from Cotton Valley below 36 gravity, and from Caddo below 28 gravity, is sold and purchased on a flat-price basis. The oil in Cotton Valley selling at flat prices ranges from 28 to 30 gravity. There was no gravity from 30 to 36 in the Cotton Valley field. The oil from Elm Grove ranges from 28 to 32 in gravity, and is sold at a flat price of $1.10 per barrel. Bellevue oil averages about 19 Beaume gravity. Caddo heavy oil below 28 gravity sells at a price of $1.00 per barrel; and Cotton Valley below 36 Beaume, at 85¢ a barrel.

Oil produced in the Jennings field is transported by barges and tank cars. Witness is not familiar with the rates or charges for transportation.

The figures given for the production of oil in North and South Louisiana on June 1, 1929, were not segregated as to asphalt- and paraffine-base crudes.

[fol. 108] Redirect examination:

Witness identifies statement, Plaintiff "C", which he testifies correctly reflects the data therein set out, which document was offered in evidence, filed, and marked "Plaintiff C".

The witness further testified that the price obtainable by the producer at the well is the posted pipe-line price.

L. T. Garrett, a witness for the plaintiff, testified:

That he is the Vice President of the Gulf Production Company and the Gulf Refining Company of Louisiana, having supervision over the Leasing Department and the Production Department of these companies in South Louisiana. He has been engaged in the production of oil for 27 years, with the Gulf Companies for 22 years, and is familiar with the oil fields of Louisiana.

With respect to paraffine-base oils, the higher the gravity the greater is the gasoline content, which, as between paraf-

fine-base oils, is largely determinative of price; the most valuable component of such oils being the gasoline. Gravity is, as respects these oils, only a rough method of approximation of the gasoline content, and does not indicate the relative value of such oils from different fields. With respect to asphalt-base oils, their value is largely for the manufacture of lubricating oils, the proportion of lubricant in the oils being determinative of value. This is largely measured by its viscosity, gravity not being an important element in the determination of the value of the oil. The largest factor in the determination of the value of asphaltic-base oils is viscosity, and next, sulphur content, gravity not entering into the test. As to mixed-base oils, the recoverable element in distillation giving them their principal value is the gas oil. Of the oils produced in the Coastal fields of Louisiana, those suitable for the manufacture of lubricant are classed as "A" grade; the others, which are asphalt- and paraffine-base combined, being classed as "B" grade. There is no common index of value [fol. 109] which can be applied generally among different classes of oil.

Cross-examination:

As to high-gravity or light oils, the Mid-Continent field is the predominant field of the United States, and largely is determinative of prices in the various fields, except as to Coastal oils. In the witness' opinion, gravity is no factor in the determination of value of Coastal oils, that being ascertained by viscosity and freedom from sulphur. The idea conveyed to the witness, as a practical oil man, by the term "Coastal 'A' oil" is that it is an oil suitable for the making of lubricants. Gasoline could be obtained from such oil by cracking, but it is more valuable because of its lubricating qualities. Gasoline being obtained so much more cheaply from the paraffine crudes, the principal value of the Coastal crudes must be for many years for the manufacture of lubricants and fuel oil. While it is always customary to determine the gravity of oils, the gravity is not a factor in the determination of the classification of Coastal oils. The only reason why a figure is fixed as the highest gravity that will be taken for Grade "A" oil is that, if the oil is of a higher gravity, it has a mixture of paraffine base,

and hence is less desirable for lubricants. While some oils of very low gravity show considerable paraffine, and therefore are not suitable for the manufacture of lubricants, an oil is apt, when it reaches a gravity of more than 25, to contain paraffine, and hence not be suitable for lubricant stock. Witness would consider as Grade "A" oil any oil that is useful for the manufacture of lubricants, regardless of its gravity. All other Coastal oils are Grade "B". There is considerable gas oil produced by distillation from Coastal "B", from which gasoline is obtainable by cracking. Such oil is a mixed-base oil, chiefly valuable for gasoline. The majority of the oil fields in South Louisiana produce oil of asphalt base, although some produce mixed-base oils. [fol. 110] The oils generally of North Louisiana are of paraffine base, with the exception of certain fields. Some of the fields of South Louisiana produce oils valuable both for lubricants and for gasoline. Up to the date of the bringing in, shortly before the trial, of the well from the new sand at Jennings, the oil produced from that field was all of asphalt base. Oil from the new well is of a gravity between 34 and 35, and would fall into the classification of Grade "B", out of which gasoline could be made. It would not be valuable for lubricants. It would also make kerosene.

Posted pipe-line prices as shown in the Oil Weekly are correct, but the witness' company buys all Coastal oil in Louisiana, whether of Grade "A" or Grade "B", at flat prices, paying $1.30 a barrel for all Coastal oil.

From the standpoint of economy and not from the absolute value of the component parts of the crude oil of the Coastal section of Louisiana, they are valuable for lubricating oil. Grade "B" oil is that which is not used in making lubricating oil. There is considerable gasoline made out of it. The majority of the oil fields of South Louisiana are of a mixed base, being both paraffine and asphalt, while the oils generally of North Louisiana are of paraffine base, with few exceptions. Stark's Dome, located in South Louisiana, is a mixed base, and is not what one would term really a lubricating oil. All of the oils in the Jennings field, up to the recent discovery of the Yount-Lee well, were asphalt base. The Yount-Lee well is valuable for its gasoline rather than for lubricating oil.

(This paragraph inserted at request of defendant.)

Redirect examination:

In the posting of pipe-line prices of Coastal oil, Grade "A" is defined as having a Beaume gravity of not over 24 at 60 degrees Fahrenheit, viscosity not less than 100 seconds Universal Saybolt at 100 degrees Fahrenheit, sulphur not over four-tenths per cent. The specifications then go [fol. 111] on to provide other technical details of the test required for this grade of oil. Grade "B" is defined as crude which does not meet the test for Grade "A". The same fields in South Louisiana produce Grade "A" and Grade "B" oils. Prior to the bringing in of the Yount-Lee well, shortly before the trial of the suit, there was no substantial amount of oil produced at Jennings that did not fall into the classification of Grade "A". This new well is in the same field with, and not far from, wells producing Grade "A" oil. There is a certain degree of uniformity of gravity of oils produced from the same sands, but gravity varies to some extent in the same field. It varies in the same sand slightly, from one to two or three degrees, and from one and a half to two degrees from the same well at different times. The present daily production of oil in the United States is around 2,800,000 barrels.

W. N. Finnegan, a witness for plaintiff, testified:

He is Assistant to the President of the Humble Oil Refining Company, and has been engaged in the oil business for 13 years. His company is engaged extensively in the production of crude oil and in its refining. It does not produce any crude in the Coastal section of Louisiana, nor buy any oil in Louisiana. Witness is familiar with the price of oil in the various fields. Gravity bears a relaton to value only in respect to paraffine-base oils, because gravity is an index to the proportion of gasoline obtainable from such oils by ordinary distillation. Gasoline is one of the lighter products of the oil, and is the one distilled at the lowest temperature. As between paraffine-base oils produced from entirely separate fields, there is no necessary relation between gravity and the proportion of recoverable gasoline. There are many different gravity price schedules of oils, there being one for the Mid-Continent district and various other gravity price schedules which differ in the various districts.

This is because the contents of the oil, and hence its recoverable products, differ. The fact that two crudes are of the [fol. 112] same gravity does not necessarily indicate that they have the same or approximately the same value or content. Paraffine-base crudes from the Mid-Continent area and the West Texas area of the same gravity are of considerable difference in value. The principal element of recoverable value in Coastal oils is, as respects "A" grade, lubricants, which value is in no manner indicated by gravity, but by viscosity. All oils produced in the Coastal area and not suitable for "A" grade purposes are classed as "B" grade. They are of mixed paraffine and asphalt base. Their most valuable recoverable product is gas oil, from which gasoline is obtained by the cracking process. The "B" grade oils differ largely in their recoverable content.

Cross-examination:

The witness' company purchases no oil in the Coastal section of Louisiana.

C. R. Minor, a witness for the plaintiff, testified:

He is Vice President of the Gulf Refining Company of Louisiana; has been in the oil business in Louisiana about 25 years, and for some years in the production and purchasing of oil in South Louisiana. At the present time he is in charge of the company's operations in Louisiana.

Gravity is an index of the relative value of oils of similar character, that is to say, having similar chemical components. It is not a general index, but only an index as to similar oils, being indicative only of the proportion of gasoline such oils will yield under distillation. Generally speaking, the higher the gravity the more gasoline may be expected to be yielded by oil by distillation.

The witness here referred to Bulletin 6114 of the Bureau of Mines, which was then and there offered in evidence by plaintiff, filed, and marked "Plaintiff D".

The gravity of oils varies in the same fields, and a par- [fol. 113] ticular tract of land does not always produce oil of a uniform gravity, it being sometimes though not frequently found that there is a material variation in the gravity of oils from the same sand. These variations some-

times also occur in the same well to the extent of one to four degrees Beaume gravity. This is also true as between wells drilled to the same sand. It is very frequent in the Louisiana fields to have wells on the same lease drilled to different sands at different depths producing oils of different gravities from the different sands. The principal value of Coastal "A" oil is aslubricant stock, that is to say, as a basis for the manufacture of lubricants. Gravity does not enter as a fundamental factor into the value of Coastal "A" oil, which sells uniformly at a flat price per barrel; whereas Grade "B" oil, which is not utilizable as lubricant stock, is usually purchased on a gravity schedule. Gravity does not enter at all into the market price of the oils produced in the Bellevue, Hosston and Urania fields of North Louisiana, nor into the price of oil produced in the Cotton Valley field from the shallow sands. Urania oil, produced in North Louisiana, is practically the same oil as Grade "A" Coastal.

Cross-examination:

Variations occur in the same field between wells very near each other in respect of the gravity of their product. This is true of practically all the fields in both North and South Louisiana. Variation in the gravity of oil from the same well usually occurs after the first or flush production. California has something like 20 different gravity price schedules, and in the remainder of the United States there are 11 or 12 different gravity price schedules. These schedules start at different points or degrees Beaume, and the grading is not uniform. In North Louisiana the gravity structure is practically the same as in use in the Mid-Continent area, starting, according to the witness' recollection, at 27 degrees Beaume for the low point. The oil in the [fol. 114] Cotton Valley field which is sold at a flat price has a gravity of 27 to 30 Beaume, the variation being of only a few degrees. As to the oil produced in Cotton Valley which is sold on a gravity basis, there is only a slight variation in gravity. This difference in the price structure in the Cotton Valley field is not due to transportation, but to the different chemical constituencies of the two kinds of oil. The greater portion of the oil produced in cotton Valley is of the class selling at a flat price, and is of a gravity ranging from 27 to 30 degrees Beaume.

At this point counsel for plaintiff, in connection with the offer previously made of the Oil Weekly, filed as Plaintiff's Exhibit "B", reoffered the same document, covering pages 128 and 130. These documents were then filed in evidence as Plaintiff's Exhibit "B".

Plaintiff then offered in evidence pages 44 and 46 of the Oil Weekly of June 14, 1929, which was filed in evidence and marked "Plaintiff E".

Whereupon plaintiff rested.

Counsel for defendant then offered the following evidence and witnesses:

Defendant offered in evidence the Eighth Biennial Report of the Department of Conservation of Louisiana, particularly pages 116 and 117, offering the whole report, but directing tne Court's attention particularly to the pages referred to. This was offered in evidence and marked "Conway 1".

J. R. HALL, a witness for defendant, testified:

That he is connected with the office of the Supervisor of Public Accounts of the State of Louisiana, and that he is personally familiar with the method and manner of transporting crude oils in the various fields of Louisiana. Oil from the Pine Island field and the Haynesville field is trans-
[fol. 115] ported by pipe line; that from Bellevue, by pipe line to Princeton, and from Princeton in tank cars of the L. & A. Railroad to Baton Rouge; oil from Haynesville, Cotton Valley, Caddo and Chrichton, by pipe line; from Urania, by tank cars from gathering lines and loading racks; from Jennings, by a short pipe line, whence it is loaded into barges and shipped to Port Arthur, Texas. The oil from the well recently brought in is shipped by tank cars. Oil is transported from Vinton and Edgerly entirely by pipe line. The same is true of the Stark's Dome field. The witness then identified certain pipe-line tariffs, which were offered in evidence, filed, and marked "Conway 3", "Conway 3-A," "Conway 4," "Conway 5," "Conway 6," "Conway 7" and "Conway 8." The tariffs are based on a barrel of oil of 100 pounds. It was then admitted,

subject to the objection of irrelevancy, that the railroad rates on oil from the Bellevue field per barrel were .338; from the Urania field, .496; and also that the barge-line rate from Jennings to Port Arthur is .165.

HUEY P. LONG, a witness for the defendant, testified:

He is Governor of Louisiana. Prior to his becoming Governor of Louisiana, he held the office of Railroad and Pipe Line and Telephone Commissioner, called part of the time Railroad Commission and the rest of the time Public Service Commission. He was also at that time in the oil business, and was attorney for oil producers. Witness testified that he produced oil in three or four fields in North Louisiana, and that he sold his oil at posted pipe-line prices.

Witness testified that all oil practically has been sold in Louisiana upon a gravity basis. At practically all times oils of 28 gravity and below have sold more or less for the same price, whether in North or in South Louisiana. Above 28 gravity, oils are sold on a gravity basis, and this statement is borne out by the quotations in the oil trade journals. There is nothing about the term "gravity" that is unintelligible; everybody in the oil business knows what it means. The price paid for oil is governed by the value of [fol. 116] the oil and the cost of transportation to the refinery. "As an example, you can take most of the oils of this State, add on the charges for transportation, and you will find that, generally speaking, the oil is more or less regulated by the refining point or its locating and distributing point." The witness testified that, as a general rule, prices are regulated by gravity and are so quoted in the trade journals. Here the witness refers to the Oil & Gas Journal, published in Tulsa, Oklahoma, with particular reference to its issue of June 13, 1929, wherein he states that practically every field in the United States is listed, and that oil is there quoted for purchase and sale on the gravity basis. Witness then refers to the Oil weekly, and states that it lists practically every field in the United States, quoting oils on a gravity basis. The witness says that the flat prices paid for oil in Bellevue, Urania, Jennings, Vinton, Edgerly and Stark's Dome are for oil under

28 gravity, and that all oils under 28 gravity bring a price almost uniform.

Beginning at about the year 1917, the Pine Island oil field was discovered in Louisiana. After that the Homer, Haynesville, Bellevue and Urania fields were discovered. At that time and at practically all times since, the oils from 28 gravity and below have all sold more or less around the same prices. For years the Jennings field, 20 to 23 gravity, sold at $1.30; Vinton field, around 19 to 23 gravity, about the same, $1.30; Edgerly, around 20 gravity, sold at $1.30; Stark's Dome, around 20 to 21 gravity, sold at $1.30. That is South Louisiana.

On the other hand, go to North Louisiana and get to Bellevue, and you find Bellevue, 19 gravity, sold at $1.30. The only difference in gravity there is within that same 19, 20, 21 point. After you pass the 28 gravity—there has been very little said on which oil has been based as to value in any field except strictly on a gravity basis. That you get from the Trade Journal and market that is posted from *toi* time to time. (These last two paragraphs inserted at defendant's request).

[fol. 117] The witness is familiar with railroad rates and pipe-line rates, and he wrote practically all the schedules of oil rates prevailing in Louisiana.

As to whether oil is sold at the well—if it is sold at the well, what one gets for his oil is the value of the oil taking into consideration its location. For instance, if one had 28 or 30 or 40 gravity oil within one mile of a refinery, where it is to be refined, it is worth more than oil within 300 miles of the refinery, with the same gravity. As an example, you can take most of the oils of this State, add on the charges for transportation, and you would find that generally speaking that oil is more or less regulated by the refining point, or its locating and distributing point.

There are other conditions sometimes that cause the rule to vary. For instance, oil concerns occasionally have such a thing as we call overproduction and the price will vary a little, but as a general rule the price will run as regulated on the gravity. The Oil Journal mentions the price of oil in certain fields, apparently on a flat basis, but in analyzing them, for instance, Bellevue crude is quoted at $1.30 instead of saying the gravity; the price on Urania crude, as

the witness recollects, is $1.00 today, and the price of Jennings, Vinton, Edgerly and Starks crude is $1.30, but analyzing the gravity of these fields, where they have stabilized the prices at a flat price, they are all under 28 gravity, every one of them without a single exception, and as a general rule even under 28 gravity they run almost uniform within one or two points. (The last two paragraphs above inserted on request of defendant.)

There is nothing in the statute under attack levying a higher tax on oil of a lower value than upon oil of a higher value. Witness says that the testimony about the difference between paraffine—and asphalt base oils "is considerably more of a myth than it is anything serious." Paraffine-base oils are valuable for lubricants, as evidence [fol. 118] of which the witness referred to Pennsylvania crudes, from which are extracted both gasoline and lubricating oil. Pennsylvania crude is a paraffine-base. There are very few low-grade oils from which gasoline cannot be profitably extracted by cracking process. This cracking process produces gasoline in a large percentage of the low-gravity oils which formerly, by old processes, never produced gasoline. Likewise, a higher percentage of gasoline can be extracted from the higher-gravity oils by cracking process than by simple distillation. Witness then refers to the Oil & Gas Journal and the Oil Weekly, which he says are consistent with each other in quotations, and points out that Coastal "A" oil is quoted at $1.30 per barrel, whereas Coastal "B" oil is quoted by a gravity schedule, beginning at 25 gravity and up. The witness testifies that in the Jennings, Vinton, Edgerly and Stark fields, where the flat price is $1.30 per barrel, he has been unable to find any instance where the gravity is not below 25. Witness says that transportation conditions and location of fields are considerable factors in the value of any oil.

The statute that is now under attack began to graduate the oil, place all oil on four cents per barrel up to 28 gravity, and graduate it above 28 gravity, which, the witness says, he presumes, would be considered fair. No discrimination can be found in the oils of North and South Louisiana based upon the tax schedule under attack. There might be a little exception pointed out, but the witness does not find where the lower value pays a lower tax than

the higher value. The witness constructed the frame of work of the statute under attack in this suit. The bill originally provided for 7½ cents tax per barrel on oil produced in the State. He was prevailed upon by the oil people that the difference in value between low and high gravity did an injustice, and thereupon a schedule was worked out so that it might accord more or less with the worth of the oil.

Speaking of Gulf Coast crude oil under the designation of Grade "A", it is quoted in the Journal at $1.30. When [fol. 119] the Journal speaks of Grade "B" it refers to the gravity table for value. The witness then says that going over to the crude oil gravity table, on the 13th day of June, 1929, which lists it Grade "B" and light oils, the table begins at 25 gravity and goes up to Grade "B" and light crudes, plainly indicating that it is a gravity basis. Not only that, but in the Jennings, Vinton, Edgerly and Starks fields, where the price is $1.30 on the oil varying in gravity from 19, 21 to 23 gravity, he has been unable to find any instance in these fields where the gravity is below 25, that they have found anything within that identical $1.30 grade crude.

(The last two paragraphs above inserted at defendant's request.)

Mrs. M. D. Carstarphen, a witness for defendant, testified:

She is connected with the Department of Conservation of the State of Louisiana, being in the office of the Director of the Mineral Division. The data shown on pages 116 and 117 of the Eighth Biennial Report of the Department of Conservation, showing oil production in the various fields of Louisiana, were compiled by her and are correctly set out in the report.

Cross-examination:

She likewise prepared the figures shown on page 123, of the said report from data furnished by oil companies, and believes them to be as correct as the other data appearing therein. In connection with the witness' testimony, coun-

sel for defendant then offered in evidence pages 116 and 117 of the said Eighth Biennial Report of the State Conservation Commission, to which offering counsel for plaintiff objected, on the ground that the report must be offered as a whole, which objection was overruled by the Court, which then stated that counsel for plaintiff would be permitted to offer any portion of said report.

SCOTT HEYWOOD, a witness for defendant, testified:

That he has been in the oil business for about 30 years, [fol. 120] and was a member of the firm that brought in the first oil field in Louisiana, at Jennings. He has also been in the oil business in Oklahoma and in Texas, and is now living in Jennings. Oils were first quoted on a gravity basis about 1922. Prior to that time, at least in the Jennings field, they were sold at flat prices. All of the oil produced from the Jennings field, except that from the Yount-Lee well, is Coastal "A," its gravity being around 23 and 24 Beaume. In the witness' opinion, no oil above 25 on the Gulf Coast is Grade "A." Witness says that no oil has been bought or sold in Louisiana since 1922 on any other basis than that of gravity. His production in Texas is in the Mid-Continent area, and has been sold on a gravity basis, beginning with 1928. Witness has had no experience in selling oil in Louisiana, except in the Jennings field. Witness does not know of any buyers of oil in Louisiana who purchase without knowing the gravity of the oil. All of the oil in Jennings is graded as Class "A", except in the Yount-Lee well, which came in only a short time before the trial, and is being sold on a gravity basis, the schedule starting at 25 gravity at $1.15 per barrel, and adding three cents for each point above that. Production from the Jennings field has declined very much in the last ten years. Its oil is moved by pipe line to the railroad, whence it is shipped either by tank cars or by barges. It was then admitted that the barge-line rate was .165 per barrel.

Cross-examination:

The quotations and statments in the Oil & Gas Journal are correct, except that the price paid at Jennings is $1.25

per barrel, instead of $1.15. The price was raised from $1.15 to $1.25 in the latter part of May.

W. H. LITTLETON, a witness for defendant, testified:

That he is an oil well contractor, and has been engaged in the shipping and producing of oil. Oil is all sold on [fol. 121] a gravity basis. So far as the witness knows, since 1922 all oil is sold on a gravity basis. The witness' practical experience has been that all oils that he handled were sold according to gravity test, and he knows of no company or operator not selling and buying on a gravity basis. The witness knows nothing at all about Gulf Coast oil.

Cross-examination:

The witness' operations have been confined to the Caddo, Red River, Cotton Valley and Homer fields, in North Louisiana. He has never produced any oil in Urania, in Bellevue, nor in the Coastal field.

P. A. COOLEY, a witness for the defendant, testified:

He has been in the oil business 43 years, in all branches of the business, in Pennsylvania, Virginia, North Carolina and Louisiana. The witness is one of the first refining people south of the Ohio River; was connected with the Standard Oil Company 11 years, from 1886 to 1897. He is an associate of Mr. Littlejohn, the previous witness. The witness knows of no oil transactions in the buying and selling of crude oil on other than a gravity basis. Never in his life has he ever bought oil in any other way than on a gravity basis. He knows of no company or individual who is now buying or selling oil on any other basis. Witness is still in the refined oil business, but does not refine any oil himself, buying his refined products and jobbing them. Witness also sells crude oil to the pipe line. The price paid to the producer is at the well. The refiner pays the transportation to the refinery.

Cross-examination:

The witness has purchased oil in the Caddo field and in the light-oil district of Texas. When he was running a refinery, he bought Coastal oil of a gravity around 21 and [fol. 122] 22, but found that he could not use it to advantage for gasoline or kerosene, this being before the discovery of the cracking process. Thereafter the witness bought his oil from fields producing light oil, mostly from Caddo. Witness says that he sold oil on a gravity schedule in the Pine Island field in 1919 and 1920.

Redirect examination:

The depth from which the oil comes has no relation to and is not reflected in its gravity.

Whereupon counsel for defendant offered in evidence copy of the Oil & Gas Journal from which Governor Long and Mr. Heywood had testified; that is to say, copies of said paper dated March 17 and June 13, 1929, particular reference being made to pages 138 and 139 of the first number and page 141 of the second.

In rebuttal, and under the previous ruling of the Court, counsel for plaintiff then offered in evidence the report of the Division of Mines, William F. Chisholm, Director, contained in the Eighth Biennial Report of the Department of Conservation of Louisiana for the years 1926-1928, with particular reference to the data shown on page 123 thereof.

Whereupon both parties rested.

IN UNITED STATES DISTRICT COURT

ORDER APPROVING STATEMENT OF EVIDENCE

The above statment of the evidence approved this 9th day of October, 1929.

(Signed) Rufus E. Foster, United States Circuit Judge, Presiding.

Approved:

(Signed) E. L. Herold, for Pltff. (Signed) Percy Saint, Attorney General.

[fol. 123] IN UNITED STATES DISTRICT COURT

[Title omitted]

PRÆCIPE—Filed August 27, 1929

The Clerk will please make up the transcript of appeal in the above entitled and numbered cause, including therein the following, to wit:

1

Verified bill of complaint and order thereon.

2

Answer of defendant.

3

The motion to substitute E. A. Conway for W. N. McFarland as defendant and the order directing such substitution.

4

The order directing issuance of preliminary injunction.

5

The injunction bond and order approving same.

6

The writ of injunction and return thereon.

7

The opinion of the Court on final hearing.

8

The final decree.

9

The condensed and narrative statement of the evidence.

10

The exhibits offered and filed in evidence by plaintiff and [fol. 124] by defendant.

11

The assignment of errors.

12

The petition for appeal and the order allowing same.

13

The appeal bond and the order approving same.

14

The minutes of the Court.

15

Citation of appeal and return.

16

This præcipe.

(Sgd.) S. L. Herold, S. P. Cousin, A. L. Benoit, Solicitors for Complainant.

I hereby certify that on this the 22nd day of August, 1929, I mailed a true copy of the foregoing præcipe to Hon. Percy Saint, Attorney General of Louisiana, addressed to his office, Courthouse Building, New Orleans, Louisiana.

(Sgd.) S. P. Cousin, of Counsel for Complainant.

[fol. 125] Clerk's certificate to foregoing transcript omitted in printing.

[fol. 126] Citation, in usual form showing service on E. A. Conway, filed August 21, 1929, omitted in printing.

[fol. 127] IN UNITED STATES DISTRICT COURT

[Title omitted]

PETITION FOR AND ORDER EXTENDING TIME—Filed in Supreme Court Sept. 17, 1929

In the above styled and numbered cause, comes now The Ohio Oil Company, the complainant and appellant, and shows the Court:

1

That citation of appeal herein was signed on August 20, 1929, and is returnable not exceeding thirty days from said date.

2

That, in accordance with the rules, appellant presented its narrative statement of the testimony to the Court for approval on Monday, September 9, 1929, and when this matter came before the Court appellee presented certain objections and additions thereto; and that the Court then gave certain directions to appellant to enable its counsel to meet the objections and supply the additional matter required by appellee.

3

That, owing to the brief period of time which remains, the appellant needs an enlargement of the time within which it is required to docket the case and file the record with the Clerk of the Supreme Court of the United States.

Wherefore mover prays that it be granted additional time within which to docket this cause and file the record thereof with the Clerk of the Supreme Court of the United States.

S. P. Cousin, S. L. Herold, R. L. Benoit, Solicitors for Appellant.

[fols. 128 & 129] Order

The foregoing motion being considered, and the Court being advised in the premises, it is ordered that the time for docketing this cause and filing the record thereof in the

Supreme Court of the United States, pursuant to the appeal sued out herein, be and the same is hereby extended until the 20th day of October, 1929.

Done and signed at New Orleans, Louisiana, on this 13 day of September, 1929.

Rufus E. Foster, United States Circuit Judge.

I hereby certify that a true copy of the foregoing was this day mailed to Honorable Percy Saint, Attorney General of Louisiana and counsel of record for the defendant in this cause.

Shreveport, Louisiana, September 11, 1929.

S. P. Cousin, of Counsel for Complainant-Appellant.

[fol. 130] [File endorsement omitted.]

[fol. 131] IN SUPREME COURT OF THE UNITED STATES

STATEMENT OF POINTS TO BE RELIED UPON AND DESIGNATION TO PRINT ENTIRE RECORD—Filed Oct. 24, 1929

Comes now the appellant, and states that it intends to rely upon each and all of its assignments of error; and, complying with the rule of this Honorable Court, states that it intends to argue such specifications under the following points, to wit:

Point I

Act 5 of 1928 of the Louisiana Legislature is void because it denies plaintiff the equal protection of the laws, in violation of the Fourteenth Amendment to the Constitution of the United States, in that:

(a)

The statute in question operates a systematic and oppressive discrimination against appellant.

(b)

The discrimination effected by the statute rests upon no reasonable basis of classification.

Point II

Act 5 of 1928 of the Louisiana Legislature is void as in conflict with Section 21 of Article X of the Constitution of Louisiana, in that:

(a)

The severance tax imposed by the statute in question is levied neither according to quantity nor to value.

[fol. 132] (b)

Whatever of classification is attempted by the act is arbitrary and unreasonable.

And the appellant further designates the whole of the record as filed as necessary for the consideration of the case.

S. L. Herold, S. P. Cousin, R. L. Benoit, Counsel for Appellant.

State of Louisiana,
Parish of Caddo:

Before me, the undersigned authority, on this day personally came and appeared S. L. Herold, to me well known, who, being by me first duly sworn, did depose and say: that he is the counsel of record for the appellant; and that he has this day mailed a copy of the foregoing points to be relied upon and designation of the parts of the record to be printed to Hon. Percy Saint, Attorney General of the State of Louisiana, as counsel for the appellee.

S. L. Herold.

Sworn to and subscribed before me this 21st day of October, 1929. Eugene Harding, Notary Public, Caddo Parish, Louisiana. (Seal of Eugene Harding, Notary Public, Caddo Parish, La.

[fol. 133] [File endorsement omitted.]

Endorsed on cover: File No. 34,571. E. Louisiana D. C. U. S. Term No. 440. The Ohio Oil Company, appellant, vs. E. A. Conway, Supervisor of Public Accounts of the State of Louisiana. Filed October 14, 1929. File No. 34,571.